



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>



600094293X

HISTORY
OF THE
GREEK ALPHABET
AND
PRONUNCIATION.

BY
E. A. SOPHOCLES, A.M.

SECOND EDITION, REVISED.



CAMBRIDGE:
PUBLISHED BY JOHN BARTLETT,
BOOKSELLER TO THE UNIVERSITY.
1854.

304. b. 6.

Entered according to Act of Congress, in the year 1854, by
JOHN BARTLETT,
in the Clerk's Office of the District Court of the District of Massachusetts.

CAMBRIDGE:
METCALF AND COMPANY, PRINTERS TO THE UNIVERSITY.

INTRODUCTION.

WHEN one nation adopts the alphabetical characters of another nation, the presumption is that it adopts also the sounds represented by those characters. Thus nothing is more natural than to suppose that the Romans originally gave to the Latin letters the sounds of their Greek prototypes. And if, in all the alphabets derived from the Latin, the same sound was uniformly denoted by the same letter, no one would ever suspect that there had been any change in this respect since the first appearance of the Phœnician signs in Greek. But such is not the case. On the contrary, the same letter often denotes more sounds than one, and, what is more perplexing, the same sound is not always represented by the same letter. Hence the question, What were the original sounds of the Greek alphabet?

Some scholars, while they confidently assert that the ancient pronunciation can no longer be determined with certainty, gravely inform us that it may be learned partly from the comparison of words which languages yet living have in common with Greek, partly through Greek words which appear in Latin, and Latin and Shemitic words which appear in Greek. But it is to be recollected that a comparison of kindred words affords no means of ascertaining the sound of a particular Greek letter, for it presupposes already a knowledge of that sound.

They tell us, also, that the Greek pronunciation may be learned in part through imitations of natural sounds left us by the ancients. These sounds would indeed be of great use in settling the pronunciation of most of the Greek and Latin letters, if the following things were granted : that the sounds made by the lower animals are articulate ; that a given species of animals, in any part of the world, at any time, and under all circumstances, make essentially the same sound ; that all men of all nations, and under all circumstances, have but one way of denoting these sounds. But as it is impossible to believe these

propositions, it is plain that Greek words of this sort must be classed with other ancient curiosities. In respect, however, to tone or accent, we cannot help admitting that its place and nature are easily determined even in these inarticulate sounds; for tone is not necessarily connected with articulation.

THE Erasmian system of Greek pronunciation was proposed about the beginning of the sixteenth century. Before that period, Greek was pronounced throughout the world after the manner of the Byzantine Greeks. The new method, like all other new things, was at first vigorously opposed by conservatism. According to Hume, "it also divided the Grecians themselves [at Oxford] into parties; and it was remarked that the Catholics favored the former pronunciation, the Protestants gave countenance to the new. Gardiner employed the authority of the king to suppress innovations in this particular, and to preserve the corrupt sound of the Greek alphabet. So little liberty was then allowed of any kind! The penalties inflicted upon the new pronunciation were no less than whipping, degradation, and expul-

sion; and the bishop declared that rather than permit the liberty of innovating in the pronunciation of the Greek alphabet, it were better that the language itself were totally banished the universities." (*History of England*, Ch. 33. A. D. 1547.)

At present many seem to be satisfied that it is best for every one to pronounce Greek after the analogy of his own vernacular tongue. This of course gives rise to as many modes of reading classical Greek as there are modern languages in Europe. And it is worthy of notice that no system of Greek pronunciation conflicts oftener with the direct testimony of the ancient grammarians, as well as with the established principles of the Greek language, than that which takes the English for its basis; for in no other European language is the same letter or combination of letters oftener employed to denote more than one sound, or no sound at all.

Now it should be borne in mind that the Greek, like all other languages, whether spoken or not, is so tenacious of its individuality, that it often compels even the framer of arbitrary rules to introduce a few exceptions in its favor. Thus, he

usually intimates that *τιμή, δίκη, μάλης, ἄτη, ἄγε, θυμέ, πῖνε, κακέ, σόον, σόν, σύν*, are not, or should not, be pronounced like *time, dike, males, ate, age, thyme, pine, cake, soon, son, sun*. Its antiquity is no reason why it should be constantly subjected to Procrustean operations, unless it can be shown that time is a predicate of truth. The Hebrew, though an older language, still retains its Orientality, and — thanks to its refractoriness — it is very doubtful whether it will ever submit to Occidental experiments. It cannot be true that an Englishman learns Greek more easily by attempting to pronounce it as if it were English; for English orthoëpy is confessedly complicated and discouraging, even when it confines itself to its own language.

It may be said that, after all, we know too little about the ancient pronunciation to decide with any degree of probability questions relating to it; and besides, there is no danger of our being misunderstood or laughed at by the ancient Greeks, if we mispronounce their words. To this we reply that we know much concerning it. From the ancient grammarians we learn that Greek poetry is based on quantity, and not on

accent; that accent is not quantity; that Latin accent is not Greek accent; that the circumflex is different from the acute; that vowels are not consonants; that mutes are not semivowels; that a diphthong is not a monophthong; that a single vowel-sound cannot constitute a diphthong; that rough is not smooth; that long is not short; that sounds requiring the action of the throat and palate can never be formed with the tongue and teeth; that the Greek, strictly speaking, has no silent letters. Moreover, Dionysius of Halicarnassus, by referring the Greek alphabetical sounds to their proper organs, has, as it were, embalmed them for our use. So that it is possible rationally to discuss the subject, and to arrive at satisfactory results, provided that the following propositions are taken for granted.

I. *That the vocal organs of the ancient Greeks were specifically the same as those of the modern European nations.*

Thus, if the utterance of long *A* required, in the time of Dionysius, the mouth to be opened as much as possible, and the breath to move in the direction of the palate, it continues to do so at the present day. And if the sound thus formed

can be no other than that which the modern Greeks, Italians, and other nations give to their A, the unavoidable inference is that it was so pronounced by the ancient Greeks.

II. *That the alphabetical sounds of the Greeks are still to be heard in one or more of the modern languages of Europe.*

There is no evidence whatever that the Greeks, as a nation, had sounds incapable of being produced by any human being now living.

III. *That the ancient Greeks spelled their words as they pronounced them.*

This rests, first, on the presumption that, in a language whose literature is underived, every sound has its appropriate symbol; a presumption, which, in the absence of proof to the contrary, may be said to amount to demonstration: secondly, on the *euphonic* and *dialectic* changes, the very existence of which would now be a matter of mere speculation, if the Greeks had not adopted this most natural mode of representing sounds. Even the jargon uttered by the Persian ambassador and the Scythian policeman, in Aristophanes, and the *barbarisms* discoverable in some of the inscriptions referred to the first three centuries

of our era, that is, the time when corruptions of all kinds were fast accumulating round the Greek language, are, in a manner, confirmatory of the truth of this proposition. The few exceptions to this rule are always noticed by the ancient grammarians.

In the following passage, Quintilian is to be considered as expressing opinions common in his age: "Ego, nisi quod consuetudo obtinuerit, sic scribendum quidque judico, quomodo sonat. Hic enim usus est literarum, ut custodiant voces, et velut depositum reddant legentibus. Itaque id exprimere debent, quod dicturi sumus." (*Instit.* 1, 7, 30. 31.)

It is conceded that the refinements of the classical pronunciation cannot be determined with precision, partly because they are not minutely described by the ancient grammarians, but chiefly because the vanishing or obscure sounds of all languages are always perplexing to foreigners. And it must not be forgotten that all modern nations are, with respect to the ancients, foreigners.

THE subject has of late assumed a new aspect.

It is maintained by some that it is expedient to adopt the Byzantine or modern Greek pronunciation, with all its supposed defects and inconsistencies, because its locality and uniformity create a presumption in favor of its antiquity. This is plausible enough. Unfortunately, however, this presumption is of no weight when it is opposed to conclusions resting upon the following considerations.

First, In ancient Greek the rhythm of a verse is based upon *quantity*, accentual rhythm being entirely disregarded, although each individual word preserved in verse also its proper accent. In modern Greek, on the contrary, the rhythm of a verse depends entirely upon *accent*, as in English and other modern languages. Quantity has no existence, or rather all the vowel-sounds are isochronous. When, therefore, Greek poetry is read after the modern method, it has no rhythm whatever, except when the accent comes at regular intervals, which is rarely the case. In short, no distinction is made between poetry and prose.

Secondly, The ancient grammarians say that a *diphthong* consists of two vowel-sounds; and, according to Sextus, they differed in pronunciation

from common vowels, although, when this author wrote, some or most of them, if not all, denoted simple sounds. In modern Greek, *EI*, *OI*, *TI* are each pronounced like *I*, *AI* like *E*, *AT* like *AB* or *AΦ*, *ET* like *EB* or *EΦ*, *HT* like *IB* or *IΦ*, and *OT* like *OB* or *OΦ*.

Thirdly, In the time of Dionysius of Halicarnassus the vowels *H* and *T* denoted sounds peculiar to themselves. And Sextus says that *H* is nothing more than *E* long. In modern Greek, they are each equivalent to *I*.

Fourthly, The *rough breathing* was strong enough to cause the smooth mute that came in contact with it to be changed into its corresponding aspirate. In modern Greek, it is nothing more than a meaningless orthographical mark.

Fifthly, The middle mutes *BΓΔ* have been converted into aspirate semivowels, and the sounds once denoted by them have been transferred, in certain cases, to *ΠΚΤ*.

Sixthly, In ancient Greek, when a consonant was doubled in pronunciation, it was doubled also in writing. In modern Greek, when a consonant is doubled in writing, only the first one is pronounced.

Finally, In ancient Greek, the circumflex was readily distinguished in pronunciation from the acute. In modern Greek, as a consequence of the loss of quantity, it is precisely the same as the acute.

It must be admitted, however, that the leading features of this system can safely be referred to the times of Chæroboscus and Theognostus; for the apparent absurdity of many of the orthographical rules of these teachers can be accounted for only on the supposition that they pronounced *AI* like *E*, *Ω* like *O*, and *H*, *Υ*, *EI*, *OI*, *ΥI* each like *I*. Theognostus belongs to the early part of the ninth century. As to Chæroboscus, he must have lived long after Priscian (*A. D.* 500), who may be regarded as the last of the ancient grammarians. During the age of Michael Psellus (say *A. D.* 850), quantity was disregarded, and verses were constructed on accentual principles. This was particularly the case with the metrical *τροπάρια* of the ritual of the Greek Church.

It seems, then, that the modern pronunciation was the pronunciation of Photius, Anna Comnena,

Constantine Porphyrogenitus, Gregorius, bishop of Corinth, Tzetzes, and Eustathius.

There are those who think that the modern Greek pronunciation ought to be the standard, because the Greeks are now an independent nation. This also sounds well. But it is exceedingly difficult to discover the connection between the political independence of a portion of modern Greece, and the pronunciation of its ancient inhabitants. The problem is purely philological, and can interest only scholars. If the system advocated is radically different from that recognized by scholars like Dionysius of Halicarnassus, Quintilian, Apollonius, Herodian, Velius Longus, Terentianus Maurus, Sextus, and Priscian, Hellenists are under no obligation to adopt it, except when they are reading or speaking the modern language. But it will be asserted that the language now used in Greece is essentially ancient Greek. To those who entertain this opinion we would suggest that there may be a wide difference between using Greek words and using the Greek language; and that identity of language necessarily implies identity of sound, rhythm, signification, and collocation of words, as

well as identity of orthography. The external form, indeed, of modern Greek is, as far as it goes, ancient, but its rhythm and syntax are decidedly modern. And with respect to signification, the Greeks are very often under the necessity of forcing modern ideas upon words formed after the analogy of the ancient tongue, and even upon such as actually occur in classical writers. But the most important consideration is, that the language of the educated Greeks is not the traditional language of the Greek nation, for, in its present form, it had no existence a century ago. The modern Greek, properly so called, is in reality the legitimate offspring of the Byzantine Greek, the last and most corrupt stage of the common Attic. It has been the language of popular poetry for at least six centuries, and is by the uneducated commonly called τὰ 'Ρωμαίικα, *the Roman Language*.* And however ancient some of its peculiarities may be, its chief characteristics cannot be critically traced farther back than the

* Long before the overthrow of the Græco-Roman empire, the Byzantines began to call themselves 'Ρωμαῖοι, a term still used by the uneducated. The inhabitants of independent Greece, however, seem to be very fond of the appellation Ἕλληνες.

times of Theodorus Ptochoprodromus (*A. D.* 1150), the first Romaic author of whom we have any definite accounts.

The modern method began to attract the attention of American scholars upwards of thirty years ago. Much has been written in its favor. In general, however, it has been treated with contempt or indifference, not, as one might hastily suppose, because its sounds are meagre and effeminate, nor because it is not the pronunciation of at least four millions of Greeks scattered all over the East, but simply because its defenders have failed to establish its claims to classical antiquity. Practical teachers doubtless feel the need of a uniform system of Greek pronunciation, but at the same time they must be satisfied that this uniformity is in accordance with the fundamental laws of the Greek language; that it rests on the authority of the ancient orthoëpists; and that it phonologically accounts for all the euphonic changes and commutations of letters.

It has already been stated that the modern Greek system recognizes the Greek accent, but not the quantity of syllables. It is now added

that, after the abandonment of this method, the defenders of the reformed pronunciation, so called, with singular inconsistency, adopted the practice of reading Greek with the Latin accent, as if the Greek accent did not rest on as solid a basis as the Latin. This, however, was owing partly to the predominance of the Latin language in Western Europe, and partly to negligence. At present the principles of Greek accentuation are better understood in that part of Europe than they were half a century ago. And in the literary institutions of Germany, except those of Austria, the Greek accent is as regularly observed as the quantity of syllables. All good scholars now admit that the *τόνος* is not the same thing as the *ᾄσις* of a foot; for the former emphasizes or sharpens a syllable without affecting its quantity; the latter raises the voice in singing, chanting, or reading recitatively.

THE history of Greek pronunciation cannot be adequately treated without a thorough knowledge of the origin and progress of Greek orthography as recorded in ancient inscriptions and manuscripts of authority. And yet no branch of Greek

grammar is more generally neglected. In spite of all the light thrown upon the history of the Greek Alphabet by the labors of Gesenius, Boeckh, Franz, and others, we are annually reminded of the dreams and mystical numbers of the pedants of Alexandria, Rome, and Byzantium.

CAMBRIDGE, *April* 10, 1854.

AUTHORS REFERRED TO.

BEFORE CHRIST.

Seventh Century.

Stesichorus

Sixth Century.

Anaximander

Dionysius of Miletus

Hecataeus

Fifth Century.

Aeschylus

Callias

Euripides

Herodotus

Gorgias

Agathon

Thucydides

Aristophanes

Alcidamas

Fourth Century.

Plato

Ephorus

Demosthenes

Aristoteles

Theopompus

Third Century.

Andron?

Euphorion

Callimachus

First Century.

Cicero

Diodorus

Varro

Nigidius

Didymus

Strabo

Dionysius of Halicarnassus

Trypho

AFTER CHRIST.

First Century.

Plinius (the elder)

Tacitus

Quintilian

Josephus

Plutarch

Second Century.

Apollonius
 Herodianus
 Lucianus
 Galenus
 Pausanias
 Arcadius
 Velius Longus
 A. Gellius
 Terentius Q. Scaurus
 Terentianus Maurus ?
 Phrynichus

Third Century.

Athenaeus
 Arusianus Messius ?
 Asper Junior ?
 A. Cornutus ?
 Melampus ?
 Heraclides ?
 Sextus

Fourth Century.

Donatus

Maximus Victorinus ?
 Marius Victorinus
 Diomedes ?
 Harpocraton ?

Fifth Century.

Priscianus

Seventh Century.

Choeroboscus ?
 Hesychius ?
 Suidas ?
 Orion ?

Ninth Century.

Michael Psellus
 Photius

Tenth Century,

Etymologicum Magnum ?

Twelfth Century.

Eustathius

CONTENTS.

PART I.

THE ALPHABET.

	PAGE
The Original Greek Alphabet	1
Antiquity of the Greek Alphabet	5
The Common Greek Alphabets	8
Greek Inscriptions	13
History of the Vowels and Breathings	16
The Short Vowels Ε, Ο	16
The Long Vowels Η, Ω	19
The Breathings ῑ, ῑ	20
The Vowel Υ	21
The Digamma Φ	21
Digammated Words in Inscriptions and on Coins	23
The Digamma mistaken for Γ, Ε, Τ	25
The Digamma represented by Β :	27
The Digamma before Ρ	30
Commutation of Φ, Υ	30
Commutation of Φ, Ο	30
Commutation of Φ and the Rough Breathing	31
Digammated Words in Latin	31
Digammated Words in the Epic and Lyric Poets	31
The names of Ε, Ο, Υ, Ω	34

History of the Consonants	37
The Aspirates Θ, Φ, Χ	37
The Double Consonants Ζ, Ξ, Ψ	38
The Consonant Q	40
The Consonants Σίγμα and Σάν	40
The Latin Alphabet	43

PART II.

PRONUNCIATION.

Greek Words in Latin Letters	45
Vowels	46
Diphthongs	46
Breathings	47
Consonants	48
Latin Words in Greek Letters	49
Vowels	49
Diphthongs	51
Consonants	51
Shemitic Words in Greek Letters	54
Greek Pronunciation	56
Pronunciation of the Vowels	59
Pronunciation of Α	59
Pronunciation of Η, Ε	59
Pronunciation of Ω, Ο	60
Pronunciation of Υ	61
Pronunciation of Ι	63
Pronunciation of the Diphthongs	66
Pronunciation of ΑΙ, ΟΙ	68
Pronunciation of ΑΥ, ΕΥ	71
Pronunciation of ΕΙ, ΟΥ	72
Pronunciation of ΥΙ	74
Pronunciation of ΑΙ (long Α), ΗΙ, ΟΙ	75
Pronunciation of ΑΥ (long Α), ΗΥ, ΟΥ	79

Breathings	83
Synizesis or Synecphonesis	84
Pronunciation of the Consonants	85
Pronunciation of the Semivowels Λ , M , N , P , Σ	85
Pronunciation of the Semivowel Z	86
Pronunciation of the Semivowels Ξ , Ψ	89
Pronunciation of the Mutes Π B Φ , T Δ Θ , K Γ X	89
Doubling of Consonants	92
Accent	98
The Greek Accent	98
The Latin Accent	103
Rhythm	107
Modern Greek or Romaic Pronunciation	109
Vowels	109
Breathings	110
Consonants	110
Doubling of Consonants	114
Synizesis	114
Rhythm	115
English Words in Greek Letters	117
Vowels	117
Consonants	118

ABBREVIATIONS.

- A.* — Ahrens's *De Graecae Linguae Dialectis*.
B. — Boeckh's *Corpus Inscriptionum Graecarum*.
BA. — Bekker's *Anecdota Graeca*.
CA. — Cramer's *Anecdota Graeca e Codd. Manuscriptis Bibliothecarum Oxoniensium*.
D. — G(W). Dindorf's *Grammatici Graeci*.
E. — Eckhel's *Doctrina Numorum Veterum*.
EG. — *Etymologicum Gudianum*.
EM. — *Etymologicum Magnum*.
F. — Franz's *Elementa Epigraphices Graecae*.
G. — Gesenius's *Scripturae Linguaeque Phoeniciae Monumenta quotquot supersunt*.
H. — Hesychius.
O. — Orionis Thebani *Etymologicum*.
R. — Rangabe's *Antiquités Helléniques*.
VA. — Villoison's *Anecdota Graeca*.

The remaining abbreviations present no difficulty.

PART I.

THE ALPHABET.

THE ORIGINAL GREEK ALPHABET.

§ 1.

THE original Greek alphabet was the same as the Phœnician or Shemitic. This proposition is established in the following manner :

First, The Greek letters used in the most ancient inscriptions are, as to *form*, essentially the same as the corresponding characters found in Phœnician inscriptions and on Hebrew coins.

Secondly, The *relative position* of nearly all the letters in the two alphabets is the same.

Thirdly, The *names* of the Greek letters are radically the same as those of the corresponding Shemitic letters.

The arrangement of the Shemitic letters is determined by the alphabetical compositions in the Old Testament ; the "Lamentations," for instance. The Greek letters are found arranged alphabeti-

cally on a very ancient Etruscan vase, made before the introduction of Ω . Thus, $AB\Gamma\Delta EFZ H\Theta IK\Lambda MN\Xi O\Pi QP\Sigma T\tau X\Phi\Psi$, where X stands before Φ . On the same vase there is another line containing only $AB\Gamma\Delta EFH Z\Theta IK\Lambda NM$, where H stands before Z , and N before M . (*F. p. 22.*) Callias gives the letters of the Ionic alphabet in the following order: $AB\Gamma\Delta H\Theta EIK\Lambda MN\Xi O\Pi P\Sigma T\tau\Phi X\Psi\Omega$, where Z is omitted, and E is placed between Θ and I (§3).

But this identity of form, relative position, and name does not necessarily prove that the Greeks derived their letters from Phœnicia; for the reverse can be maintained with equal propriety. The priority of the Shemitic alphabet, however, is satisfactorily settled by the following considerations:

The names of most of the Phœnician letters are *significant*; thus, *Aleph*, *Beth*, *Gimel*, *Daleth*, respectively mean *Ox*, *House*, *Camel*, *Door*. But the names of the Greek letters are meaningless words; they merely designate certain figures. Now if we admit that the Greeks, whose language was radically distinct from the Shemitic group, borrowed the forms and names of the Phœnician letters, we see at once why those names should have no meaning in Greek. But the contrary hypothesis, namely, that the Greeks were the inventors, implies that the Phœnicians,

before the appearance of the Greek alphabet in their country, had no words for some of the most familiar objects, such as *Head, Mouth, Eye, Ear, Tooth, Hand* ; or if they had, they suddenly and unanimously dropped them and substituted the names of the Greek letters in their place, simply because those objects bore a distant resemblance to the Greek alphabetical characters ; which is inverting the order of nature.

As to the significance of the names of the Phœnician characters, it is now admitted that the representatives of the alphabetic sounds were originally pictures of natural objects whose names *began* with those sounds. Thus the sound *A* was denoted by the outline of the head of an ox, because *Aleph*, the Phœnician word for *Ox*, began with that sound.

The original Greek alphabet consisted of *twenty-one letters* ; that is, of all the Phœnician characters except *Tsade*, the sound of which was inadmissible in Greek.

Here follows a table :

Phoenician.		Original Greek.	
א	Aleph	Α	*Αλφα
ב	Beth	Β	Βῆτα
ג	Gimel	Γ	Γύμμα
ד	Daleth	Δ	Δέλτα
ה	He	Ε	Εῖ
ו	Waw	Ζ	Ζαῦ
ז	Zayin	Η	*Ητα
ח	Hheth	Θ	Θῆτα
ט	Teth	Ι	*Ιῶτα
י	Yod	Κ	Κάππα
כ	Kaph	Λ	Λάμβδα
ל	Lamed	Μ	Μῦ
מ	Mem	Ν	Νῦ
נ	Nun	Ξ	Ξίγμα
ס	Samech	Ο	Οῦ
ע	Ayin	Π	Πῖ
פ	Pe	wanting	
צ	Tsade	Ϟ	Κόππα
ק	Qoph	Ρ	Ρῶ
ר	Resh	Σ	Σάν
ש	Shin	Τ	Ταῦ
ת	Taw		

ANTIQUITY OF THE GREEK ALPHABET.

§ 2.

As early as the seventh century before our era, the Greeks had no tradition, properly so called, relating to the origin of their alphabet; which being the case, they had recourse to hypothesis and fiction. Thus Stesichorus attributed the invention of letters to Palamedes, which merely shows that the time of their first appearance in Greece was to this poet a fabulous age.

According to Anaximander, Hecataeus, and Diogenes, the Milesian authors, the alphabet was brought to Greece by Danaus, the Egyptian. But Herodotus thinks that, before the arrival of Cadmus, alphabetical writing was unknown in that country. It is obvious, however, that his "*ὡς ἐμοὶ δοκέειν, as it seems to me,*" involves the idea that what he says of Cadmus in this connection was not tradition, but opinion. The fact is, the Phœnician and Greek alphabets resembled each other so strikingly in form, arrangement, and name, that it required no tradition whatever to prove their identity. And as Cadmus was the most distinguished Phœnician name connected with the early history of Greece, it was natural for Herodotus to infer that he or his companions

introduced letters, as well as other branches of knowledge, among the Greeks.

The successors of Herodotus were less happy in their conjectures. They confounded the Phœnician navigator with his namesake of Miletus. And with regard to the etymology of the word *φωινικήια* or *φωνίκια* (*letters*), they imagined all sorts of absurdities.

The most ancient writers say nothing about the number of letters composing the original alphabet. And Dionysius of Halicarnassus informs us that nothing definite was known on the subject. But most of the grammarians asserted that it contained sixteen characters, because *sixteen is the square of the quaternary*, the source of inexhaustible nature. As, however, the old alphabet happened to have more than sixteen figures, they unhesitatingly banished from it Ζῆτα, Ἡτα, Θῆτα, Κόππα, and Σάν, in order to vindicate the prerogatives of this wonderful number. The Ionic alphabet, according to these authorities, must contain twenty-four letters, because the day is divided into twenty-four hours; or still better, because twenty-four is the product of the *quaternary* and the *cube*.

STESICHORUS. *BA.* pp. 783. 786. Palamedes.

ANAXIMANDER, HECATAEUS, DIONYSIUS. *BA.* pp. 783. 786.

DANAUS.

AESCHYLUS, *Pr.* 469. 470. Prometheus.

EURIPIDES, *Pal. frag.* 2. Palamedes.

HERODOTUS, 5, 57-61. Cadmus.

GORGAS, *Apol. Pal.* 8, p. 118. Palamedes.

ALCIDAMAS, *Pal.* p. 75. Orpheus.

PLATO, *Phaedr.* p. 274 C. *Phileb.* p. 18 B. Theuth.

DIDORUS, 1, 16. Hermes. — 3, 67. Linus, Cadmus, Pelasgians, Orpheus, Pronapides. — 5, 57. Actis, Cadmus, Egyptians. — 5, 74. Syrians, Phœnicians.

DIONYS. HAL. *de Comp.* 14. 'Ο ἀριθμὸς δ' αὐτῶν ὅστις ἐστὶν οὐ ράδιον εἰπεῖν ἀκριβῶς, ἐπεὶ πολλὴν παρέσχε καὶ τοῖς πρὸ ἡμῶν ἀπορίαν τὸ πρᾶγμα.

CICERO, *N. D.* 3, 22. Thoth.

PLINIUS, *N. H.* 7, 57 (56). The Assyrian letters — Mercurius — Syrians — Cadmus brought to Greece sixteen letters — Palamedes added Θ Ξ Φ Χ — Simonides added Ζ Η Ψ Ω — Aristotle thinks that the original alphabet consisted of eighteen letters, and attributes the invention of Θ Χ to Epicharmus — Menon — the extraordinary antiquity of the astronomical observations of the Babylonians — the eternity of alphabetical writing.

TACITUS, *Annal.* 11, 14. Egyptian hieroglyphics — Cadmus, Cecrops, Linus, Palamedes, Simonides — the original alphabet had sixteen letters — Damaratus and Evander brought it to Italy.

JOSEPHUS, *Arch.* 1, 2, 3. The antediluvian inscription.

PLUTARCH. *Sympos.* 9, 3, 1. 2, p. 738. The Quaternary and other mystical numbers.

BA. pp. 710-717. 780-790. 1169. Also CA. vol. 4, pp. 318. 319. 400. About the origin of letters.

THE COMMON GREEK ALPHABETS.

§ 3.

To the original alphabet of twenty-one letters the Greeks added $\tau \phi \chi \xi \psi \omega$. But for a long time all the letters were not used by all the Greek tribes. Thus the ancients speak of the *Attic* and *Ionic* alphabets.

The alphabet employed in the most ancient Doric and Æolic inscriptions found at Thera and Melos, in Peloponnesus, Bœotia, Sicily, and Southern Italy, may be called the *Æolo-Doric* alphabet. It is found also on coins belonging to the Doric and Æolic states.

The *Attic* alphabet is found in Attic inscriptions cut before the archonship of Euclides (*B. C.* 403).

The *Ionic* alphabet is found in the earliest Ionic inscriptions. It is the same as that used at the present day, and called the *Greek Alphabet*. According to Andron, it first made its appearance at Samos. The Athenians formally adopted it during the archonship of Euclides.

Callias, in his *Γραμματικὴ Τραγωδία*, mentions all the characters composing this alphabet except *Ζῆτα*. And as he spells *Βῆτα* $H BH$, the letter *H* must have been a vowel in his time. Euripides,

in his Theseus, and Agathon, in his Telephus, write the word ΘΗΣΕΤΣ with an *H*. All which shows that it was known at Athens some time before Euclides. But the following facts render it doubtful whether it was in general use before the beginning of the Peloponnesian war:

Aristophanes, in his *Babylonians*, called the Samian people πολυγράμματος, *many-lettered*, alluding to the fact that they used more alphabetical characters than the Athenians. If so, when the *Babylonians* was represented (*B. C.* 426), the Ionic alphabet must have been regarded at Athens as a new-comer. According to Ephorus, Calistratus the Samian brought this alphabet to Athens during the Peloponnesian war; which must mean that he made special efforts to render it popular in that city. Further, Galen believes that Hippocrates did not employ the vowels *H* and *Ω*. And a Scholiast says the same of Euripides. They may, however, have been misled by the current report that the Ionic letters were not used before the archonship of Euclides.

Here follows a table of the alphabets found in the most ancient inscriptions:

Æolo-Doric.	Attic.	Ionic.	Name.
A	A	A	Ἀλφα
B	B	B	Βῆτα
Γ	Γ	Γ	Γάμμα
Δ	Δ	Δ	Δέλτα
E	E	E	Εἰ
F	Φαῦ
Z	Z	Z	Ζῆτα
H breathing	H breathing	H vowel	Ἥτα
Θ	Θ	Θ	Θῆτα
I	I	I	Ἰῶτα
K	K	K	Κάππα
Λ	Λ	Λ	Λάμβδα
M	M	M	Μῦ
N	N	Ν	Νῦ
ΚΣ, Ξ	ΧΣ	Ξ	Ξἰ
O	O	O	Οῦ
Π	Π	Π	Πῖ
Q	Κόππα
P	P	P	Ρῶ
Σ (Σάν)	Σ	Σ	Σίγμα
T	T	T	Ταῦ
Τ	Τ	Τ	Ῥ
ΠΗ, Φ	Φ	Φ	Φἰ
ΚΗ, Χ	Χ	Χ	Χἰ
ΠΣ, Ψ	ΦΣ	Ψ	Ψἰ
		Ω	Ῥ

CALLIAS, *Γραμματικὴ Θεωρία*, *apud Athen.* 10, 79, p. 453 c, d. Called also *Γραμματικὴ Τραγωιδία*, 7, 1, p. 276 a; 10, 69, p. 448 b.

Ἄλφα Βῆτα Γάμμα Δέλτα
 Ἡτα Θῆτα, θεοῦ γὰρ Εἰ γέ·
 Ἰῶτα Κάππα Λάμβδα Μῦ Νῦ
 Ξῖ τὸ Οὐ Πῖ Ρῶ Σίγμα Ταῦ,
 Ὑ παρὸν Φῖ,
 Χῖ τε τῷ Ψῖ εἰς τὸ Ὡ.

Θεοῦ γὰρ Εἰ γέ, *for Εἰ belongeth unto the god*, seems to imply that the letter Ε, which was seen on the temple of Apollo at Delphi, ought to occupy the seventh place, because the number *seven* was sacred to that god. (*Plutarch. Περὶ τοῦ Εἰ ἐν Δελφοῖς*, pp. 384 *et seq.*; *Sympos.* 9, 3, 1, p. 738 D.)

Ὑ παρὸν Φῖ, Χῖ τε τῷ Ψῖ, Ὑ *being near τῷ Φῖ*, and Χῖ *being near τῷ Ψῖ*.

Id. ibid. p. 453 e, f.

EURIPIDES, *Thes. frag.* 4; also *apud Athen.* 10, 80, p. 454 b, c, d. A description of each letter in the word ΘΗΣΕΥΣ.

Ἐγὼ πέφυκα γραμμάτων μὲν οὐκ ἴδρις,
 Μορφὰς δὲ λέξω καὶ σαφῆ τεκμήρια·
 Κύκλος τις ὡς τόρνοις ἐκμετρούμενος·
 Οὗτος δ' ἔχει σημεῖον ἐν μέσῳ σαφές.
 Τὸ δεύτερον δὲ πρῶτα μὲν γραμμαὶ δύο,
 Ταύτας διείργει δ' ἐν μέσαις ἄλλη μία·
 Τρίτον δὲ βόστρυχός τις ὡς ἐλιγμένος.
 Τὸ δ' αὖ τέταρτον ἦν μὲν εἰς ὀρθὴν μία,
 Λοξαὶ δ' ἐπ' αὐτῆς τρεῖς κατεστηρικμέναι
 Εἰσίν. Τὸ πέμπτον δ' οὐκ ἐν εὐμαρεῖ φράσαι·
 Γραμμαὶ γὰρ εἰσιν ἐκ διεστώτων δύο,
 Αὗται δὲ συντρέχουσιν εἰς μίαν βάσιν.
 Τὸ λοιπὸν δὲ τῷ τρίτῳ προσεμφερές.

AGATHON, *Teleph. apud Athen.* 10, 80, p. 454 d. A description of each letter in the word ΘΗΣΕΥΣ.

Γραφῆς ὁ πρῶτος ἦν μεσόμφαλος κύκλος,
 Ὅρθοί τε κανόνες ἐζυγούμενοι δύο,
 Σκυθικῶι τε τόξωι τὸ τρίτον ἦν προσεμφερές,
 Ἐπειτα τριόδους πλάγιος ἦν προσκείμενος,
 Ἐφ' ἐνός τε κανόνος ἦσαν ἐζυγούμενοι δύο.
 Ὅπερ δὲ τρίτον ἦν καὶ τελευταῖον πάλιν.

ARISTOPH. *Babyl.* quoted by Hesychius and Photius.

Hesychius. Σαμίων ὁ δῆμός, φησί τι περι των Ἀριστοφάνους τοὺς ἐκ τοῦ μύλωνος ἰδὼν Βαβυλωνίους·

Σαμίων ὁ δῆμός ἐστιν ὡς πολυγράμματος!

καταπληττόμενος τὴν ὄψιν αὐτῶν καὶ ἐπαπορῶν. Ἔστι δὲ καὶ ἐτέρα ἱστορία, δι' ἣν πολυγράμματος ἔφη δῆμον· ἐπειδὴ Ἑλλήνων Σάμιοι πολυγράμματοι ἐγένοντο πρῶτοι καὶ χρησάμενοι καὶ διδόντες εἰς τοὺς ἄλλους Ἑλληνας τὴν διὰ τῶν τεσσάρων καὶ εἴκοσι στοιχείων χρῆσιν.

Photius *Lexic.* (*Suidas*). Σαμίων ὁ δῆμος ὡς πολυγράμματος, Ἀριστοφάνης Βαβυλωνίοις, ἐπισκώπων τοὺς ἐστιγμένους. Ἡ ὅτι παρὰ Σαμίους εὐρέθη πρῶτοις τὰ ΚΔ γράμματα ὑπὸ Καλλιστράτου, ὡς Ἀνδρῶν ἐν Τρίποδι. Τοὺς δὲ Ἀθηναίους ἔπεισε χρῆσθαι τοῖς τῶν Ἰώνων γράμμασιν [Ἀρχίνους ὁ Ἀθηναῖος] ἐπὶ ἄρχοντος Εὐκλείδου. Τοὺς δὲ Βαβυλωνίους ἐδίδαξε διὰ Καλλιστράτου Ἀριστοφάνης [ΚΔ] ἔτεσι πρὸ τοῦ Εὐκλείδου καὶ ἐπὶ Εὐκλείους. Περὶ δὲ τοῦ πείσαντος ἱστορεῖ Θεόπομπος.

Photius has χρῆσθαι τοῖς τῶν Ἰώνων γράμμασιν. Οἱ δὲ Ἀθηναῖοι ἐπὶ. Suidas reads χρῆσθαι τῶν Ἰώνων γράμμασιν Ἀρχίνους ὁ Ἀθηναῖος ἐπὶ. The true reading must be χρῆσθαι τοῖς τῶν Ἰώνων γράμμασιν Ἀρχίνους ὁ Ἀθηναῖος ἐπὶ.

EPHORUS *apud Scholiast. Venet. ad Il. 7, 185, p. 182.* οὐχ οἱ αὐτοὶ γὰρ ἦσαν παρὰ πᾶσι τοῖς Ἑλλήσι χαρακτῆρες· διάφορα δὲ καὶ τὰ τῶν στοιχείων ὀνόματα. Καλλίστρατος δὲ ὁ Σάμιος ἐπὶ τῶν Πελοποννησιακῶν ταύτην μετένεγκε τὴν γραμματικὴν, καὶ παρέδωκεν Ἀθηναίοις, ὥς φησιν Ἐφορος.

DEMOSTH. *in Neaer. p. 1370.* Καὶ τοῦτον τὸν νόμον γράψαντες ἐν στήλῃ λιθίνῃ ἔστησαν ἐν τῷ ἱερῷ τοῦ Διονύσου παρὰ τὸν βωμὸν ἐν Λίμναις. Καὶ αὕτη ἡ στήλη ἔτι καὶ νῦν ἔστηκεν ἀμυδροῖς γράμμασιν Ἀττικοῖς δηλοῦσα τὰ γεγραμμένα.

Harpocraton. Ἀττικοῖς γράμμασι, Δημοσθένης κατὰ Νεαίρας, ἀντὶ τοῦ παλαιοῖς. Τὴν γὰρ τῶν εἴκοσι τεσσάρων γραμματικὴν ὁψέ ποτε παρὰ τοῖς Ἰωσιν εὑρεθῆναι.

Hesychius. Ἀττικὰ γράμματα, τὰ ἀρχαῖα, ἐπιχώρια.

THEOPOMPUS, ANDRON. See the extract from Photius.

PLUTARCH. in *Vit. Aristid.* § 1. Ὡς ἐλέγχει τὰ γράμματα τῆς μετ' Εὐκλείδην ὄντα γραμματικῆς.

Plutarch here maintains that the Aristides of the inscription, Ἀντιόχης ἐνίκα, Ἀριστείδης ἐχορήγει, Ἀρχέστρατος ἐδίδασκε (*B. n.* 211), could not have been the famous Aristides, because this inscription was written after the archonship of Euclides.

GALEN. and SCHOL. ad *Euripid. Phoen.* 693. See at the end of § 5.

BA. p. 783 (*CA.* 4, p. 318). Πιθανὸν δὲ κατὰ τόπον εὑρετὰς γεγενῆσθαι. Διὸ καὶ ἄλλοι παρ' ἄλλοις εἰσὶ χαρακτῆρες τῶν στοιχείων. Οἷς δὲ νῦν χρώμεθα εἰσὶν Ἰωνικοὶ, εἰσενέγκαντος Ἀρχίνου [παρ' Ἀθηναίοις] ψήφισμα τοὺς γραμματιστάς, ἦγουν τοὺς διδασκάλους, παιδεύειν τὴν Ἰωνικὴν γραμματικὴν, ἦγουν τὰ γράμματα.

The author of this extract must be quoting some earlier writer, probably Theopompus; for the words γραμματιστάς, and γραμματικὴ in the sense of γράμματα, were evidently obsolete in his time.

GREEK INSCRIPTIONS.

§ 4.

It is more than probable that the Greeks, in imitation of their masters, the Phœnicians, originally wrote all their lines from right to left. But of this we have no direct proof. Afterwards they

adopted the *βουστροφηδόν* method, that is, they wrote alternately from right to left and left to right. The tendency, however, even during the prevalence of this method, must have been towards the left, and consequently the *first line* must have run in that direction. Finally, from some cause or other, the practice of writing all the lines from left to right prevailed.

This being understood, inscriptions of which the *odd lines* are written from right to left must be regarded as of higher antiquity than those of which all the lines move towards the right. The same applies to single lines or words written from right to left. As to inscriptions of which the odd lines run from left to right, they must have been written when the tendency was towards the right; in short, they are later imitations.

Herodotus informs us that the Ægyptians wrote from right to left, and the Greeks from left to right. He nowhere intimates that the Greeks wrote in any other way. According to Euphron, the laws [of Solon] were written *βουστροφηδόν*. From these two statements it is inferred that the *βουστροφηδόν* method was entirely obsolete when Herodotus was a child, and obsolescent before Solon's death.

The following are some of the most ancient Greek inscriptions of which the date can be determined with certainty.

B. n. 16. Ἰάρων ὁ Δεινομένεος καὶ τοὶ Συρακόσιοι τῷ Δι Τυράν' ἀπὸ Κύμας, *Hiero the son of Deinomenes, and the Syracusans, dedicate to Zeus these Tyrrhenian spoils taken at Cumæ.*

All the lines run from left to right. It was engraved on a bronze helmet in commemoration of the victory which the Syracusan fleet, commanded by Hiero, obtained over the Tyrrhenians near Cumæ (*B. C. 474*). This piece of armor, together with other Tyrrhenian spoils, as the inscription intimates, was sent to the temple of Zeus at Olympia, where it was found in 1817. It is now in the British Museum.

B. n. 165. Ἐρεχθίδος οἶδε ἐν τῷ πολέμῳ ἀπέθανον ἐν Αἰγύπτῳ, ἐν Φοινίκῃ, ἐν Ἀλιεῦσιν, ἐν Αἰγίνῃ, Μεγαροῦ, τοῦ αὐτοῦ ἐνιαυτοῦ. Then follows a list of proper names. *B. C. 457.*

R. n. 89. Εὐθυμένους ἄρχοντος. *B. C. 437.*

B. n. 170. On those Athenians who fell at Potidæa. *B. C. 432 – 429.*

B. n. 147. Ἐπὶ Γλαυκίππου ἄρχοντος. *B. C. 410.*

B. n. 160. Ἐπὶ Διοκλέους ἄρχοντος. *B. C. 409.*

B. n. 150. Written *B. C. 393.*

B. n. 1688. Πυθίου ἄρχοντος. *B. C. 380.*

A mutilated inscription, written ἐπὶ Ναυσινίκου ἄρχοντος (*B. C. 378*), was published by the Archæological Society of Athens in 1851.

HEROD. 2, 36. Γράμματα γράφουσι καὶ λογίζονται ψήφοισι Ἕλληνες μὲν ἀπὸ τῶν ἀριστερῶν ἐπὶ τὰ δεξιὰ φέροντες τὴν χεῖρα, Αἰγύπτιοι δὲ ἀπὸ τῶν δεξιῶν ἐπὶ τὰ ἀριστερά, καὶ ποιεῦντες ταῦτα αὐτοὶ μὲν φασὶ ἐπὶ δεξιὰ ποιεῖν, Ἕλληνας δὲ ἐπ' ἀριστερά.

EUPHORION *apud Harpocrat.* Ὁ κάτωθεν νόμος, Δημοσθένης ἐν τῷ κατ' Ἀριστοκράτους. Δίδυμος, ἦτοι, φησὶ, τὴν Ἠλιαίαν λέγει ὁ ρήτωρ, διὰ τὸ τῶν δικαστηρίων τὰ μὲν ἄνω τὰ δὲ κάτω ὀνομάζεσθαι· ἢ διὰ τὸ σχῆμα τῆς ἐν τοῖς ἄξοσι γραφῆς βουστροφηδ[ὸν] γεγραμμένης, ἥτις τὸν ἀπὸ τῶν εὐωνύμων ἀρχόμενον νόμον κάτωθεν ὀνομάζει ὁ Δημοσθένης. Ὅτι γὰρ, φησὶ, βουστροφηδὸν ἦσαν οἱ ἄξονες καὶ οἱ κύρβεις γεγραμμένοι δεδήλωκεν Εὐφορίων ἐν τῷ Ἀπολλοδώρῳ.

PAUSAN. 5, 17, 3. Τῶν δὲ ἐπὶ τῇ λάρνακι ἐπιγράμματα ἔπεισι

τοῖς πλείοσι γράμμασι τοῖς ἀρχαίοις γεγραμμένα· καὶ τὰ μὲν ἐς εὐθὺ αὐτῶν ἔχει, σχήματα δὲ ἄλλα τῶν γραμμάτων βουστροφηδὸν καλοῦσιν Ἕλληνες· τὸ δὲ ἐστὶ τοιόνδε· ἀπὸ τοῦ πέρατος τοῦ ἔπους ἐπιστρέφει τῶν ἐπῶν τὸ δεύτερον, ὥσπερ ἐν διαύλου δρόμῳ.

MARIUS VICTORINUS, *p.* 2499. About the βουστροφηδόν method. This grammarian had never seen an inscription written in this way.

HISTORY OF THE VOWELS AND BREATHINGS.

THE SHORT VOWELS E, O.

§ 5.

1. IN all the alphabets except the Ionic, *E* and *O* are either long or short; in the Ionic alphabet they are short. *B. n.* 165 πολεμοι, φοινικει, στρατεγον, for πολέμῳι, Φοινίκηι, στρατηγῶν.

2. And in all the alphabets, without exception, *E* and *O* represented also the diphthongs *EI* and *OT* respectively, but only when these diphthongs originated in *prolongation*.

(a) Thus, when *E* and *O* were from any cause lengthened into *EI* and *OT*, these diphthongs were written simply *E* and *O*. *B. nn.* 75 εχσεναι, οφελετο, for ἐξείναι, ὀφειλέτω. 76 βολει, οφελομενα, διαχειρίζουσιν, for βουλῇι, ὀφειλόμενα, διαχειρίζουσιν. 87 επιγραφεν, for ἐπιγράφειν. 160 εχσεργασμενα,

σπερας, τοσ λιθοσ, for ἐξειργασμένα, σπείρας, τοὺς λίθους.

(b) When *EI* arose from *EE* contracted, it was written simply *E*. *B. nn.* 74 αβλαβες, for ἀβλαβείς. 75 πολεσ, for πόλεις. 76 επεστατε, πρυτανες, for ἐπεστάτει, πρυτάνεις.

(c) When *OT* arose from *EO*, *OE*, or *OO*, contracted, it was written simply *O*. *B. nn.* 138 αργυροσ, for ἀργυροῦς. 139 ηρακλεοσ, for Ἡρακλέους. 160 διοκλεοσ, for Διοκλέους. 147 γλαυκιππο, φσεφισαμενο το δεμο, for Γλαυκίππου, ψηφισαμένου τοῦ δήμου. 3044 τιμοχεοντες, for τιμονυχέοντες.

3. *EI* was written in full when it was a radical syllable, or when it arose from the contraction of *E* and *I*. Thus,

(a) In radical syllables. *B. nn.* 16 Δεινομένεος. 75 δείξαι. 76 ἐξαλειφόντων, Εὐκείθης, τείχη. 80 αεί. 82 δανείζεται. 144 εἰκοστήν. 148 Μεταγειτνιώνος. 150 Διογείτων. 151 διερείσματα. 160 γείσα, κειμένων, λείας, εἶπεν. 165 Δεινίας. 3044 εἰδώς, κείνου. *R. n.* 46 Ποσειδῶνι. *F. n.* 12 Φειδιπίδας.

(b) In the dative of the third declension, as contracted from *-ει*. *B. nn.* 76 πόλει. 147 Ἰκαριεῖ. 160 προστάσει.

To this head belong, 76 εἰ, ἐπειδή, ἐπειδάν.

(c) In the third person singular of the indicative active, as arising from *-ετι* or *-εσι*. *B. nn.* 82 ἄρχει. 170 ποθεῖ.

(d) In *-εῖδης*, as contracted from *-εῖδης*. *B. n.* 165 Ἀριστοκλείδης, Ἀριστείδης, Ἡρακλείδης.

(e) In *-ειος, -εια, -ειον, -εικος*, as arising from *-εῖ-*. *B. nn.* 76 γραμματεῖα. 87 πρυτανεῖον. 147 ἐπετείων. 151 Γοργόνειον. 160 Πεντελεικός. *F. nn.* 49 Σιγειῆς. 52 Γρυνειῆς.

(f) Add to these, *B. nn.* 76 συγκλειόντων. 82 πλείστον, implying a contraction.

4. *OT* was written in full when it was a radical syllable. *B. nn.* 3 τοῦτ' for τοῦτο. 147 Σπουδίας, Βουτάδης. *R. nn.* 6 Σπουδίδης. 334 Βουκάττης.

5. In process of time the full orthography was employed, irrespectively of the origin of these diphthongs. And in inscriptions of the Alexandrian and subsequent periods they are regularly written *EI* and *OT*.

QUINTILIAN. 1, 7, 11. Illa vetustissima transeo tempora, quibus et pauciores literae, nec similes his nostris earum formae fuerunt, et vis quoque diversa: sicut apud Graecos o literae, quae interim longa ac brevis, ut apud nos, interim pro syllaba, quam nomine suo exprimit, posita est.

GALEN. *Comment. III. in Hippocr. VI. Epidem text. XL. vol. 9, p. 470, ed. Charter.* Γραφόντων γὰρ τῶν παλαιῶν τὸν τε τοῦ Η δίφθογγον [read φθόγγον] καὶ τὸν τοῦ Ε δι' ἐνὸς χαρακτῆρος, ὃς νῦν μόνος σημαίνει τὸν ἕτερον φθόγγον τὸν Η [read Ε], πολλὰ γέγονεν ἀμαρτήματα, τῶν ἐγγραφομένων οὐ κατὰ τὴν γνώμην τῶν γραφάντων τὴν μετάθεσιν τῶν γραμμάτων ποιησαμένων. Διὸ καὶ προσέχειν ἀκριβῶς χρὴ ταῖς τοιαύταις γραφαῖς ἐν αἷς δυνατόν ἐστι τὸν τοῦ Η φθόγγον εἰς τὸν τοῦ Ε μεταθέντας ἢ τοῦμπάλιν γράψαντας ἐπανορθώσασθαι τὴν γραφὴν. Ὅμοιως δὲ καὶ τοῦ Ο καὶ Ω ποιητέον, ἐπειδὴ καὶ τούτων ἀμφοτέρων οἱ φθόγγοι δι' ἐνὸς χαρακτῆρος ἐγράφοντο.

ATHENAEUS, 11, 30, p. 466 f. Πάντες οἱ ἀρχαῖοι τὸ Οὖ [v. l. ο] ἀπεχρῶντο, οὐ μόνον ἐφ' ἧς νῦν τάττεται δυνάμεως, ἀλλὰ καὶ ὅτε τὴν δίφθογγον διασημαίνει διὰ τοῦ Οὖ [v. l. ο] μόνου γράφουσι. Παραπλησίως δὲ καὶ τὸ Εἶ γράφουσιν ὅταν καὶ καθ' αὐτὸ μόνον ἐκφωνῇται καὶ ὅταν συνεζευγμένου τοῦ Ἰῶτα.

SCHOLIAST. *ad Eurip. Phoen.* 693 (682). Σοὶ νιν ἐκγονοὶ κτίσαν, ἱν ἦι, τῶι ἐκγόνῳ σου, τῶι Κάδμῳι, αἱ θεαὶ κατέκτισαν τὰς Θήβας. Γέγονε δὲ περὶ τὴν ἀρχὴν [read γραφὴν] ἀμάρτημα. Ἐπὶ ἀρχόντος γὰρ Ἀθήνησιν Εὐκλείδου, μήπω τῶν μακρῶν εὐρημένων, τοῖς βραχέσιν ἀντὶ τῶν μακρῶν ἐχρῶντο, τῶι Ι [read Ε] ἀντὶ τοῦ Η, καὶ τὸ Ο ἀντὶ τοῦ Ω. Ἐγραφον οὖν τὸ δῆμῳι μετὰ τοῦ Ι [read ΟΙ], δε μοι. Μὴ νοήσαντες δὲ ὅτι κατὰ τὴν ἀρχαίαν γραφὴν καὶ δεῖ μετατεθεῖναι [read μεταθεῖναι or μετατεθῆναι] τὸ Ο εἰς τὸ Ω μέγα ἐτάραξαν τὸ νοητόν.

THE LONG VOWELS Η, Ω.

§ 6.

THE character Η, in all the alphabets except the Ionic, represents the *rough breathing*; in the Ionic alphabet it always stands for long Ε. *B. nn.* 76 ηα, ηεμεδαπο, for ᾗ, ἡμεδαποῦ. 165 ηυπερβιος, for Ὑπερβιος.

The change of Η into a vowel must have been a gradual one, for in some of the most ancient inscriptions it is both a vowel and breathing. *F. nn.* 1, α. ρεκσανορ, αρκηαγετας, προκλησ, for Ρη-ξάνωρ, Ἀρχαγέτας, Προκλής. 1, β. μαλληγ . . . 1, ε. Ὁρθοκλής. 7 Ἐρασικλής. 8 Ἰατροκλής. 10 Πσήν. 12 πηειδιπιδ . . . for Φειδιπιδ . . .

In the inscriptions containing the above exam-

ples, *ρεκσανορ*, *μαληη* . . . , *πηειδιπιδ* . . . are written from right to left ; which shows that, at Thera at least, *H* was often used as a vowel probably before Simonides was born (§ 4).

2. *Ω*, a modification of *O*, is the latest of all the new letters. The most ancient inscriptions in which it occurs are *B. nn.* 10. 24. 39 (?). 3044.

ATHENAEUS, 9, 57, p. 398 A. Τεκμαιρόμενοι οὖν οἱ Ἀθηναῖοι καὶ διὰ τῆς τάξεως τὴν ἐνοῦσαν προσωιδίαι φύσιν οὐκ ἐπὶ τῶν φωνηέντων τιθέασι, ὥσπερ τὰς ἄλλας, πρὸ δὲ τούτων τάσσουσιν. Οἶμαι δὲ καὶ διὰ τοῦ *H* στοιχείου τυπώσασθαι τοὺς παλαιοὺς τὴν δασείαν. Διόπερ καὶ Ῥωμαῖοι πρὸ πάντων τῶν δασυνομένων ὀνομάτων τὸ *H* προσγράφουσι, τὸ ἡγεμονικὸν αὐτῆς διασημαίνοντες.

THE BREATHINGS †, ‡.

§ 7.

After *H* was converted into a vowel, the character †, resembling the first half of it, was employed to denote the *rough breathing*. It is found in the Heracleian Tables, and on Heracleian and Tarentine coins, and is written as a regular letter, that is, *before* its vowel. In general, however, this breathing was left to pronunciation, even when its representative was *H*. (*B. nn.* 5774. 5775. *E.* 1, pp. 148. 153.)

The character ‡, resembling the other half of *H*, denoted the *smooth breathing*. It is found only in manuscripts.

In the course of time these characters became **Ⲛ** and **Ⲛ̅**, and finally ' and ', respectively.

The practice of placing the breathings over their respective vowels is at least as old as Priscian (1, 47).

BA. p. 692. Τὸ σημεῖον τῆς δασείας, ἦτοι τὸ διχοτόμημα τοῦ Η τὸ ἐπὶ τὰ ἔξω ἀπεστραμμένον τίθεται ἐπάνω φωνήεντος δασυνομένου, ἥγουν ἐκ τοῦ θώρακος μετὰ πολλῆς τῆς ὀρμῆς ἐκπεμπομένου. Τὸ δὲ ἕτερον τοῦ αὐτοῦ στοιχείου διχοτόμημα τὸ ἐπὶ τὰ ἔσω ἐστραμμένον, ἐπάνω φωνήεντος ψιλουμένου, ἦτοι ἐξ ἔκρων τῶν χειλέων προφερομένου.

Ibid. pp. 712. 778. 780.

VA. 2, pp. 107. 108. 121.

THE VOWEL **Υ**.

§ 8.

Υ is the corresponding vowel of *Faû*. Its most ancient form is **V** (the prototype of which is recognized in one of the forms of the Phœnician *Waw*), which finally became **Υ** and **Υ̅**.

THE DIGAMMA **F**.

§ 9.

The character **F**, representing the consonantal sound of *Faû*, occurs in the Bœotic and Peloponnesian inscriptions; also in an Attic or Ionic inscription found at Delos. In the Cretan and Heracleian inscriptions, its form is **Ⲛ**, evidently a

modification of *F*. In the numerical system it is ϵ or ς , the latter of which coincides with the abbreviation ς for $\sigma\tau$, and is often mistaken for it.

According to Varro and Didymus, the Æolians called this letter *Faû*, *Vau*. Dionysius of Halicarnassus, who describes *F* very accurately, has no name for it. Its later name *Δίγμμα*, *Digamma*, that is, *Double Gamma*, occurs for the first time in Trypho, and applies only to *F*, which has the appearance of *TT* united into one form. (Compare *Double U*, the name of *W*, the English Digamma.)

Originally it was common to all the dialects. The Ionic tribe, however, discontinued the use of it earlier than the other Greeks; consequently it has no place in the Attic and Ionic alphabets. In one of the Bœotic inscriptions we find *Φοικίας* and *Ἀλεξανδρείας* (*B. n.* 1564); in another, *Φοικίας* (incorrectly copied *Εοικίας*) and *Καρχαδόνιον* (*B. n.* 1565). The former shows that the Digamma was used by the Bœotians at least as late as the commencement of the Alexandrian period; the latter makes the destruction of Carthage its latest date (*B. C.* 146).

In the time of Dionysius of Halicarnassus *F* was an obsolete character, for he tells us that it was often prefixed by the ancient Greeks (that is, *his* ancient Greeks) to words beginning with a vowel. He states further, that it had the sound

of the syllable *OT*, which can only mean that *OT* was its corresponding vowel sound. Now *OT*, when this author wrote, was essentially a simple sound, equivalent to the Latin *U*. It follows therefore that *F* was pronounced like the English *W* in *wood*, *would*, *wine*. Melampus says that it was sounded like *OT* or *OI*.

The expression τὸ Αἰολικὸν Δίγαμμα, *Aeolicum Digamma*, means that this letter was found in the poems of Alcæus and Sappho, regarded by the grammarians as the Æolic models, not that it was longest retained by the Asiatic Æolians, for it does not occur in inscriptions belonging to Æolis and Lesbos, the most ancient of which are referred to the age of Alexander. By Αἰολεῖς the Greek grammarians regularly designate the inhabitants of Æolis and Lesbos. The Latins usually apply the term *Aeoles* to all the subdivisions of the Æolic and Doric races.

1. *Digammated Words in Inscriptions and on Coins.*

ΑἴϜας, Αἴας. *E.* 4, p. 388.

αἰϜεῖ, αἰεῖ. Found in the first line of the Crissean Inscription, according to Ulrichs's apograph. *B.* n. 1. *A.* 2, p. 10.

Compare Latin *aeuū*.

ἀϜυτοῦ, αὐτοῦ, old Ionic or Attic. *B.* n. 10. Here the *Ϝ* is merely strengthened by its kindred semivowel; that is, this word is a dissyllable.

αὐλαϜυδός, κιθαραϜυδός, κωμαϜυδός, ραψαϜυδός, τραγαϜυδός, Bæotic for αὐλωιδός, κιθαρωιδός, κωμωιδός, ραψωιδός, τραγωιδός, where the part -αϜυδός stands for -αιδός, from ἀείδω, originally ἀϜεῖδω. *B.* n. 1583.

Βακεύσαι, a dative singular, Bæotic. *B. n.* 1639. The *υ* is strengthened by *F*.

Δημοφύων, **Δημοφῶν**. *Priscian.* 1, 22; 6, 69.

Διφί, **Διί**, Doric. *B. n.* 29. Compare Latin *divus*.

ἐγφληθίωντι, Doric for **ἐξειληθῶσι**, from **ἐξειλέω**. *B. n.* 5774.

Compare Latin *volvō*.

Εὐφάρα, a proper name. *E. 2, p.* 196. The *υ* is strengthened by *F*.

Φάδων, a proper name derived from **ἀνδάνω**, written according to Ulrichs's apograph. *B. n.* 1574. *A. 2, p.* 516. Compare Latin *suaavis*, English *sweet*.

Φαλείοις, **Ἡλείοις**, Æolic. *B. n.* 11.

Φαναχσ . . . , the first part of some proper name beginning with **ἀναξ**. *R. n.* 317.

Φάξιος, a native of *Axos*, in Crete, Doric. *E. 2, p.* 305. Also **Φαύξιος**. *B. n.* 3050. ***Αξος** or ***Οαξος**, in Scylax (*p.* 19) is written **Πάξος**. Stephanus of Byzantium derives ***Αξος** from **ἀγνυμι**.

Φάργον, **ἔργον**, Æolic. *B. n.* 11. Compare English *work*.

Φάρνων, a man's name, derived from **τοῦ ἀρνός**, Bæotic. *B. n.* 1569, *a*.

Φάσκων, a man's name. *A. 2, p.* 516.

Φαστίμιος, a derivative of **ἄστυ**. *Id. ibid.*

Φαστυμειδόντιος, a compound of **ἄστυ**. *Id. ibid.*

Φασστυόχου, a compound of **ἄστυ**. *B. n.* 1520.

Φείκατι, **εἵκοσι**, Doric. *B. n.* 5775.

Φεικατίδειον or **Φικατίδειον**. *Ibid.*

Φεικατί-πέδον or **Φικατί-πέδον**. *B. nn.* 5774. 5775.

ῥέκτος, **ἔκτος**, Doric. *B. n.* 5775. Compare Latin *sextus*, English *sixth*.

Φελάτια, **Ἐλάτεια**, Bæotic. *B. n.* 1569, *a*.

Φελατιῆος, **Ἐλατειαῖος**, Bæotic. *B. n.* 1569.

Φελάνος, found on a Cretan vase. *A. 2, p.* 554. See **Γελχά-νος** (below), and compare the Latin *Vulcanus*.

ῥέξ, **ἔξ**, Doric. *B. n.* 5775. Compare Latin *sex*, English *six*.

ἑξακάτιοι, ἑξακόσιοι, Doric. *Ibid.* Compare Latin *sexcenti*.

ἑξήκοντα, ἐξήκοντα, Doric. *Ibid.* Compare Latin *sexaginta*.

ἑέπος, ἔπος, Æolic. *B. n.* 11. Compare Latin *vox vocis*.

ἑέτος, ἔτος, Æolic, Bæotic, and Doric. *B. nn.* 11. 1569. 5774.

Compare Latin *vetus*.

Ἑχίας, a proper name derived from ἔχω, like Ἀγίας from ἄγω.

R. n. 327.

ἱδῖος, ἴδιος, Doric. *B. nn.* 5774. 5775.

ἱκατι, ἔκοσι, Doric and Bæotic. *B. nn.* 1569. 5774. 5775.

ἱκατίδειον, see *ἑικατίδειον*.

ἱκατίπεδον, see *ἑικατίπεδον*.

ἱλαρχιόντων, εἰλαρχεόντων, Bæotic, according to Leake's apograph. *B. n.* 1588. *A.* 2, *p.* 516 (written by mistake *ἑλαρχιόντων* ?).

ἱσοτέλεια, ἰσοτέλεια, Bæotic. *B. nn.* 1562. 1563.

ῥοκία, οἰκία, Doric and Bæotic. *B. nn.* 4. 1565. Compare Latin *vicus*.

ῥάτρα, ρήτρα, Æolic. *B. n.* 11.

ῥοκία, οἰκία, Bæotic. *B. n.* 1562. 1563. 1564.

Ἡρῥαοῖσις, dative plural, Æolic, for Ἡραιοῖσι. *B. n.* 11.

κλέφος, κλέος, in the first line of the Crissean inscription, according to Ulrichs's apograph. *B. n.* 1. *A.* 2, *p.* 10. Compare Latin *celebris*.

Λαφοκόφω, Λαοκόων. *Priscian.* 1, 22; 6, 69.

2. The Digamma mistaken for Γ, Ε, Τ.

The copyists of the Byzantine period being, as a body, entirely ignorant of the existence of the Digamma, almost invariably mistook the character *F* for Γ, Ε, or Τ. Thus for *Fέθεν*, quoted by Apollonius (*de Pronomine*), they wrote Γέθεν, although he expressly states that the Æolians prefixed the Digamma to the personal and possessive pronouns

of the third person. In modern times, also, it has been mistaken for *Γ*, *Ε*, or *Τ*.

In the glossary of Hesychius many digammated words are written with a *Γ*; a fact to be explained as follows: On the supposition that the compiler of this work was acquainted with the nature of the Digamma, he must have written these words with a *Γ*. But as this letter had no place in the Greek alphabet when he lived, he was obliged to arrange them as if they were spelled with a *Γάμμα*, the form *Γ* and the name *Digamma* naturally suggesting *Gamma* rather than any other letter. Finally, his transcribers mistook *Γ* for *Γ*.

Here is a list of digammated words of this description. We give them as they appear in Hesychius.

ἄΓατᾶσθαι, βλάπτεισθαι. For ἀτᾶσθαι. — ἀΓάτῃμαι, βέβλαμμαι. Perf. Pass. of ἀτᾶσθαι.

Γαδεῖν, χαρίσασθαι. For ἀδεῖν. — Γάδεσθαι, ἥδεσθαι. — Γάδεται, ἥδεται. — Γάδονται, εὐφραίνονται. For ἥδονται. — Γακτός, κλάσμα. From ἄγνυμι. — Γάλι, ικανόν. For ἄλις. — Γᾶλλοι, ἥλοι. Latin *vallus*. — Γάμμοροι, ἀμέτοχοι, ἐστερημένοι. For ἄμμοροι. — Γανδάνειν, ἀρέσκειν. For ἀνδάνειν. — Γάσσαν, ἡδονήν. Formed from *ad-* like *δσσα* from *ἐπ-*. — Γατάλαι, οὐλαί. For ὠτειλαί.

Γέαρ, ἔαρ. Latin *ver*. — Γεῖθρον, ἔνδυμα. Formed from *ἐ-* like *ρεῖθρον* from *ρέ-ω*. — ΓέΓκαλον, ἥσυχον. For εὐκηλον. — Γεκαθά, ἐκούσα. — Γέλαν, ἀγὴν ἡλίον. For ἔλην, εἴλην. — Γέλλα, τίλαι. Latin *vello*. — Γελίκη, ἔλιξ. — Γελλίξαι, συνειλησai. From ἐλίσσω. — Γελοδυτία, ἡλιοδυσία. See Γέλαν. — Γέλουτρον, ἔλυτρον, ἥγουν λέπυρον. — Γελχάνος, ὁ Ζεὺς παρὰ Κρισίῳ [read Κρησί]. See *Γελχάνος* (§ 9, 1). — Γέμματα, ἱμάτια. For εἴμμα-

τα, from *ἐννυμι*. — *Γέννου*, *Κύπριοι*, καὶ λάβε, καὶ κάθιζε. In the former sense from *ἐλεῖν*. See, also, *Γέντο*. — *Γεννόν*, *ἀρχαῖον*. Compare *ἐνος*, Latin *a n n u s*. — *Γέντο*, *ἔλαβεν*, *ἀνέλαβεν*. See, also, *Γέννου*. — *Γέντα*, *κρέα*, *σπλάγχνα*. Compare the following. — *Γέντερ*, ἡ *κοιλία*. If *Γέντερ* is the Latin *venter* in Greek letters, it must have been adopted when *F* was still in use; an improbable supposition. — *Γέργανα*, *ἐργαλεία*. For *δργανα*. — *Γερπηρία*, *ἀπώλεια*. From *ἔρρω*. — *Γερρῶ*, *ἀποδῶλα*. From *ἔρρω*. — *Γεστία*, *ἐνδυσις*, *μέλη*, *ιμάτια*. From *ἐννυμι*. Latin *vestis*, *vestio*. — *Γέστρα*, *στολή*. From *ἐννυμι*. — *Γέτις*, *ἐλπίς*. — *Γέτορι*, *ἔτει*. — *Γέτος*, *ἐνιαυτός*. For *ἔτος*.

Γηθία, ἡ *θη*. — *Γηλιᾶσθαι*, *κατέχεσθαι*. From *εἰλέω*. Latin *v o l v o*. — *Γηλουμένους*, *συνειλημένους*. For *εἰλουμένους*. — *Γηλιώμενοι*, *κατεχόμενοι*. For *εἰλεόμενοι*. — *Γῆμα*, *ιμάτιον*. For *εῖμα*. — *Γήνεσθαι*, *κατέχεσθαι*. For *εἰλεσθαι*.

Γία, ἡ *νθη*. For *ῖα*. Latin *viola*. — *Γίapes*, *ἔαρ*. — *Γιλός*, *ἐτερόφθαλμος*. For *ιλλός*. — *Γίν*, *σοί*. For *ῖν*. — *Γίξαι*, *χωρῆσαι*. For *εἶξαι*, from *εἴκω*. — *Γίο*, *αὐτοῦ*. For *ῖο*, from *ῖ*. — *Γίπον*, *εἶπον*. — *Γίς*, *ἰμὰς καὶ γῆ καὶ ἰσχάς*. Latin *vis*. — *Γισάμεναι*, *εἰδέναι*. From *ἴσαμι*. Latin *video*. — *Γιστόν*, *ἴσον*. — *Γιστία*, *ἰστοურγοί*. — *Γιστιῶ*, *παύσομαι*. From *ἴστημι*. — *Γισχύν*, *ἰσχύν*. — *Γιτία*, *ἰτέα*. Latin *vitex*, English *with*, *withy*.

Γοῖδα, *οὐκ οἶδα*. — *Γοῖδημι*, *ἐπίσταμαι*. From *οἶδα*. — *Γοίνακες*, *βλαστοί*. From *οἶνος*. — *Γοῖνος*, *οἶνος*. Latin *vinum*, English *wine*. — *Γοιναῦτις*, *οἶνοχόη*. — *Γόλαμος*, *διωγμός*. For *οὐλαμός*. — *Γόρνυξ*, *δρνυξ*.

Γῶι, *ἐαντῶι*, *ιδίῶι*, καὶ *σῶι*.

3. *The Digamma represented by B.*

After *Faû* was banished from all the Greek alphabets, its sound, which still existed in some of the less cultivated dialects, was represented by *B*, this being the only consonant in the common

alphabet that could possibly be employed as a substitute for *Faû*. The very name of this letter was changed into *Baû*. Terentianus Maurus classes *βίτον* (*ἴτυν*) with the digammated words *Vesperus*, *Vesta*, *vestis*, *vis*, *ver*, *Veneti*, *viola*, thus showing that he regarded *B*, in this case, as taking the place of the obsolete *F*. We shall see below that, during the same period, the Greeks represented the Latin *Vau* by *OT* or *B*. It is hardly necessary to remark here that Dionysius of Halicarnassus does not recognize this mode of representing the Digamma.

Here follows a list of words of this class, most of which are found in Hesychius.

Ἀάβακτοι, ἀβλαβεῖς. For ἀάπατοι.

Ἀβελίην, ἡλιακόν, Παμφύλιοι. — ἀβέλιον, ἥλιον. Κρήτες. For ἀέλιον. — ἀβηδόνα, ἀηδόνα. — ἀβήρει, αἰδει. See αἰλαφυδός, above. — ἀβηρούσιν, αἰδουσιν.

Αιβετός, αιετός, Περγαῖοι. *EM*.

Ἀκροβᾶσθαι, ὑπακούειν, ὑποτετάχθαι. For ἀκροᾶσθαι.

Ἀπαβοῖδον, ἐμμελῶς. Λάκωνες. For ἀπωιδῶς contracted from ἀπαοιδῶς.

Βαβέλιος, αέλιος, Pamphylian. *Eustath.* p. 1654, 21. — βάγος, κλάσμα ἄρτου, μάξης. καὶ βασιλεύς, καὶ στρατιώτης. Λάκωνες. From ἄγνυμι and ἄγω. — βάδομαι, ἀγαπῶ. For ἡδομαι. — Βαδύ, a place in Elis, for Ἠδύ, from ἡδύς. *Pausanias*, 5, 3, 3. — βαλικιώτης, συνέφηβος. Κρήτες. For ἡλικιώτης. — Βαναξίβουλος, Ἀναξίβουλος. *B. nn.* 2572. 2577. *Date A. D.* 107. — βανεία, τὰ ἀρνεία. καὶ βάννιμα, τὸ αὐτό. Compare *Φάρνων*, above. — βάξον, κατάξιον. Λάκωνες. From ἄγνυμι. — βαρρεῖ, ἀπολεῖ. From ἔρρω. — βασκαρίζειν, σκαρίζειν. Κρήτες. For ἀσκαρίζειν. Compare *Φάσκων*?

Βείκας, μακράν. See βεκάς. — βείκατι, εἴκοσι. Λάκωνες. — βεικηλά, νωχελῇ, ἀχρεΐα. Λάκωνες. From εἴκω. Compare the English weak. — βειλαρμόστας, βειλάρχας. Ταραντίνοι. For Δαρμόστης, ἰλάρχης. — βείρακες, ἰέρακες. — βειράκη, ἡ ἀρπακτική. — βεκάς, μακράν. For ἐκάς. *Marius Victorinus*, p. 2461. Γεκηβόλος. — βεκῶς, μακρόθεν. — βέλημα, κώλυμα, φράγμα ἐν ποταμῷ. Λάκωνες. From εἰλέω. — βελλάσεται, ἡλιωθήσεται. — Compare Γέλαν, above. — βερηδεύει, δραπετεύει. *EM.* — βέρης, ὁ δραπέτης. *EM.* From ἔρρω. — βέρρης, δραπέτης. — βερρεύει, δραπετεύει. — βεσόν, ἔθος. καὶ ὁ τῶν ἐθῶν ἔμπειρος. Λάκωνες δὲ βεστικόν . . . — βέστον, τὸ ἱμάτιον ὑπὸ Λακώνων. οἱ δὲ βέττον. Διογένης. *EM.* From ἔννυμι.

Βηλέα, Ἥλέα, from Ἥλεός, connected with Ἥλις, originally *Fālis*. *EM.* Compare *Φαλείοις*, above. — βηράνθεμον, νάρκισσος. οἱ δὲ Τηράνθεμον. λέγουσι. A compound of ἦρ.

Βιδεῖν, ἰδεῖν, Laconian. *EG.* Compare the English wise, wit, wisdom. — βισχύν, ἰσχύν, σφόδρα, ὀλίγον. Λάκωνες. — Βιτυλέων, from Βιτυλεύς, derived from Οὔτυλος, in Ptolemy Βίτυλα. *B. n.* 1323. Date *A. D.* 240. — βίτυν, ἴτυν. *Terentianus Maurus*, 658. — βίωρ, ἴσως, σχεδόν. Λάκωνες.

Βοινόβιος, Οἰνόβιος. *B. n.* 2576. Date *A. D.* 114.

Δάβελος, δαλός. From δαίω, to burn. Compare δάφιον, *Aleman apud Priscian*. 1, 22.

Ἐβασσον, ἕασσον. Συρακούσιοι.

Ἐκδάβη, ἐκαύθη. Compare δάβελος.

Εὐρυβανάσσης, Εὐρυανάσσης. *B. n.* 1372. Date *A. D.* ?

Θαβακόν, θακόν ἢ ὁμορόν.

Καραβίδες, γράες. Μεθυμναῖοι.

Μουκηρόβας, καρνοκατάκτης. From ἄγνυμι. In *Athenaeus*, 2, 40, p. 53 b, μουκηρόβατον, probably for μουκηρόβατον.

Φάβος, φάος. *Eustath.* p. 1654, 21. Compare Δημοφύων, above.

Ὠβέα, τὰ ὠά. Ἀργεῖοι. ἢ τὰ ἀργὰ ὦτα (read ἢ ὠφά, τὰ αὐτά?) *Priscian*. 6, 69. ὦφόν, οὐνυμ.

4. The Digamma before P.

The Digamma was sometimes prefixed to *P* at the beginning of a word. Thus *φράτρα*, *φρήξις*.

Most commonly, however, the Æolians preferred the sound of *B* to that of *F* (*Apollon. de Adverb. pp.* 566. 567. *Priscian.* 1, 23. 25).

Βρᾶ, ράι. *EM.* — *βράδινος, ραδινός.* *Sappho.* — *βραιδιον, ράιδιον.* *EM. and O.* — *βράκαλον, ρόπαλον.* *H.* — *βρακός, κάλαμος, ιμάτιον· πολυτελές.* *H.* — *βρίσδα, ρίζα.* *EM.* — *βρόδα, Διολείς, ρόδα.* *H.* — *βρόδον, ρόδον.* *EM. and O.* — *βρντήρ, ρντήρ.* *EM.* — *βρντίδες, ρντίδες.* *EM.*

5. Commutation of F, T.

The consonantal sound of *F* was often changed into its kindred vowel sound *T*, but chiefly when it was preceded by *A* or *E*. (*BA. p.* 694. *CA.* 3, *p.* 237.) Thus,

Αύαταν, ἄταν. In Pindar this word is an anapæst, *ἀφάταν.* — *αὔετῇ, τὸν αὐτοετῇ.* *H.* — *αὐϊδέτου, ἀφανοῦς, ἀοράτου.* *H.* From *ιδεῖν.* — *αῤρηκτος, ἄρρηκτος*, from *ρήγνυμι.* *Eustath. p.* 548, 30. *BA. p.* 694. Compare *frango*, wreck, break; and *φρήξις*, in Alcæus.

Εῤα, ἕα. *H.* See *ἔβασον*, above. — *εῤαδε, ἕαδε*, in Homer. From *ἀνδάνω.* — *εῤάλωκεν, ἑάλωκεν.* *CA.* 3, *p.* 237. — *εῤέθωκεν*, from *εθο-, ἔθω.* *H.* — *εῤράγη, ἐρράγη.* *CA.* 3, 237.

Κανάξαις, κατάξαις, in Hesiod. Formed from *καταφάξαις*, like the Laconian *καβάσι* from *κατάβηθι*, in Hesychius.

6. Commutation of F, O.

In a few instances *F* is changed into *O*. Thus,

*Οαξος for φάξος, *Αξος; Οἴτυλος for φίτυλος. Compare βίτυν, ἰπέα, οἰούα.

7. Commutation of *F* and the Rough Breathing.

The Digamma was often changed into the Rough Breathing (*Priscian.* 1, 22); as ἀνδάνω, ἄλις.

On the other hand, the Rough Breathing was often changed into *F*. See φέκτος, φέξ, φεξακάτιοι, φεξήκοντα, above.

8. Digammated Words in Latin.

Some words are found digammated only in Latin and other kindred languages. Thus,

Βοῦς, bos bovis. Compare the Bæotic βουῶν, βούεσσι. *B. n.* 1569. — Δᾶος, Davus. *Priscian.* 6, 69. — ἐννέα, novem, nine. — κλείς, κληίς, clavis. — λαιός, laevus, left. — λευρός, λείος, laevis, levis. — λούω, λόω, lavo. — ναῦς, navis. — νέος, novus, English new. — νεῦρον, nervus, English nerve. — οἷς, ovis. *Priscian.* 6, 69. — ὀγδοός, octavus. — σάω, salvus, salveo, save, safe. — σκαιός, scaevus, left, not right. — ὕλη, silva.

9. Digammated Words in the Epic and Lyric Poets.

In the Epic and Lyric poets, a number of words, beginning with a vowel, have the following peculiarities:

(a) A short vowel standing immediately before them is commonly suffered to retain its place; as, *Od.* 1, 4. ἄλγεα δὲν κατὰ θυμόν.

(b) The final syllable of the preceding word, if short, is commonly made long, as if by position, even when it stands in the thesis; as, *Od.* 1, 5. ἀρνύμενος ἦν τε ψυχόν.

(c) A final long vowel or diphthong, in the thesis, often remains unaltered before these words; as, *Od.* 1, 89. μᾶλλον ἐποτρύνω, καὶ οἱ μένος.

As most of these words are found or implied in the preceding lists, it is inferred that these poets commonly pronounced them with the Digamma.

It is to be observed, however, that, in our copies, *N* movable, *F*, or *T* is often introduced before these words; as, *Od.* 1, 117. κτήμασιν οἷσιν ἀνάσσοι. *Hesiod. Op.* 432. ἕτερον *F* ἄξαις, for ἕτερον *F* ἄξαις.

Also, οὐκ or οὐχ is used before them for οὐ; as, ἦ οὐχ ἄλκις, for ἦ οὐ *F*άλκις, in Homer.

When a digammatized word is preceded by a short vowel in the arsis, *F* was probably doubled in pronunciation (*Prisc.* 1, 21); as, φίλε ἐκυρέ, ἄρα ἔρξαν, ἀπὸ ἔθεν.

The words to which these remarks apply are chiefly the following, with their compounds and derivatives: ἄγνυμι, ἄλκις, Ἄλκις, ἄναξ, ἀνδάνω, Ἄρνη, τοῦ ἀρνός, ἄστν, ἔαρ, ἔθω, εἶδον, εἵκοσι, εἵκω, εἵλω, εἰπεῖν, ἐκάς, ἕκαστος, ἐκυρός, ἐκών, Ἐλατος, ἐλίσσω, ἔλπω, ἔλωρ, ἔννυμι, ἔργω or ἔργω, ΕΡΓΩ, το δο, ἔσπερος, ἔτης, ἔτος, ἦροψ, Ἰδομένεύς, Ἰλιον, ἶον, Ἰρις, Ἰρος, ἶς, ἴσος, ἰτέα, ἴτυς, οἶκος, οἶνος, and the personal and

possessive pronouns of the third person, οὖ, οἶ, ἑ, ὅς, ἦ, ὅν, with their modifications.

VARRO et DIDYMUS *apud Priscian.* 1, 20. *V* vero loco consonantis posita eandem prorsus in omnibus vim habuit apud Latinos quam apud Aeoles Digamma. Unde a plerisque ei nomen hoc datur, quod apud Aeoles habuit olim Digamma, id est *Vau*, ab ipsius voce profectum, teste Varrone et Didymo, qui id ei nomen esse ostendunt. Adeo autem hoc verum est quod pro Digamma Aeolico *F* ponitur *V*: quod sicut illi solebant accipere Digamma modo pro consonante simplici, teste Astyage, qui diversis hoc ostendit usibus, ut in hoc versu, Οἰόμενος Φελέναν Ελικώπιδα, sic nos quoque pro consonante plerumque simplici habemus *V* loco Digamma positum.

DIONYS. HAL. *Rom. Antiq.* 1, 20, 10. Ἐλώδη, ἀ νῦν κατὰ τὸν ἀρχαῖον τῆς διαλέκτου τρόπον Οὐέλια ὀνομάζεται. Σύνηθες γὰρ ἦν τοῖς ἀρχαίοις Ἑλλῆσιν, ὥς τὰ πολλὰ, προτιθέναι τῶν ὀνομάτων ὑπόσων αἱ ἀρχαὶ ἀπὸ φωνηέντων ἐγίνοντο τὴν ΟΥ συλλαβὴν ἐν στοιχείῳ γραφομένην. Τοῦτο δ' ἦν ὥσπερ Γάμμα διτταῖς ἐπὶ μίαν ὀρθὴν ἐπιζευγνύμενον ταῖς πλαγαῖς, ὥς Φελένη καὶ Φάναξ καὶ Φοῖκος καὶ Φανήρ καὶ πολλὰ τοιαῦτα.

The city here referred to is Ἑλέα, Ὑέλη, or Οὐέλια, *Velia*.

TRYPHO, § 11. Προστίθεται τὸ Δίγαμμα παρά τε Ἰωσὶ καὶ Αἰολεῦσι καὶ Δωριεῦσι καὶ Λάκωσι καὶ Βοιωτοῖς· οἶον ἄναξ Φάναξ, Ἑλένα Φελένα. Προστιθέασιν καὶ τοῖς ἀπὸ φωνηέντων ἀρχομένοις. Ἄπαξ δὲ παρ' Ἀλκαίῳ τὸ ρῆξις καὶ φρηξις εἴρηται.

The substance of the above extract from Trypho is found also in *BA.* p. 1168.

MELAMPUS *in BA.* p. 777. Τὸ γὰρ εὐρίσκόμενον παρὰ τοῖς Αἰολεῦσι Δίγαμμα οὐκ ἔστι γράμμα — ἔχει δὲ τύπον τόνδε *F* — ὃ προστιθέασιν οἱ Αἰολεῖς ἐκάστη λέξει [τῇ] παρ' ἡμῖν δασυνομένη, αὐτοὶ ψιλούντες πᾶσαν λέξιν. Σύμβολον οὖν παρ' αὐτοῖς ἐστὶν ἐκφωνήσεις ἔχον τῆς ΟΙ καὶ ΟΥ διφθόγγου. Ὅθεν δέικνται μὴ ὃν γράμμα μηδὲ συγκαταριθμούμενον τοῖς γράμμασιν· οὐ γὰρ ἐν πάσαις ταῖς Ἑλληνικαῖς διαλέκτοις εὐρίσκεται, ὥς τὰ ἄλλα γράμματα, οὔτε ἀφ' ἑαυτοῦ ἀρχεται ἐν τῷ ἐκφωνεῖσθαι, ὥς τὰ ἄλλα.

Ibid. Ἐπειδὴ δέ τινες τὸ παρὰ τοῖς Βοιωτοῖς καὶ Αἰολεῦσι λεγόμενον Δίγαμμα, ὃ τυποῦται οὕτως F, βούλονται τοῖς στοιχείοις κατατάσσειν, ἔλθωμεν καὶ εἴπωμεν τοὺς λόγους δι' οὓς βούλονται αὐτὸ κατατάσσειν τοῖς στοιχείοις, καὶ τότε δείξομεν ὅτι οὐκ ἔστι στοιχεῖον.

HERACLIDES *apud Eustath.* p. 1654, 20. Ἐν δὲ ἐτέρῳ τόπῳ λέγει ὁ αὐτὸς Ἡρακλείδης τοὺς Παμφυλίους ἄλλως χαίρειν τῷ Β προτιθέντας αὐτὸ παντὸς φωνήεντος. Τὸ γοῦν φάος φάβος φασὶ, καὶ τὸ ἀέλιος βαβέλιος. Οὕτω δέ φησι καὶ τὸ ὀρούω ὀρούβω λέγουσι, καὶ περισπωμένως ὀρουβῶ.

MARIUS VICTORINUS, p. 2468. F autem Aeolis dumtaxat idem valere, quod apud nos V, cum pro consonanti scribitur, vocarique B aῦ et *Digamma*.

THE NAMES OF E, O, γ, Ω.

§ 10.

In the play of Callies already referred to (§ 3), the names of E, O, γ, and Ω are respectively Eῖ, Oῖ, γ, Ω. According to Plato, they had no names analogous to Ἀ-λφα, Β-ῆτα, Γ-άμμα, and so on. The inscription on the tomb of Thrasy-machus had γ and Oῖ as the names of γ and O respectively. In the metrical arguments to the fifth, fifteenth, twentieth, and twenty-fourth books of the Iliad, their names are the long monosyllables Eῖ, Oῖ, γ, Ω. Quintilian expressly states that the name of O was the diphthong OT (§ 5). Plutarch gives Eῖ and Oῖ as the names of E and O. Herodian says that the diphthong EI was the name of the vowel E. In Athenæus, the name of E is Eῖ, and that of O is Oῖ, or simply O. Ac-

according to Eustathius, Υ was called $\Upsilon\mu$ by the Æolians.

The expressions $\textcircled{\small O}$ $\mu\acute{\iota}\kappa\rho\acute{o}\nu$, $\textcircled{\small \Omega}$ $\mu\acute{\epsilon}\gamma\alpha$, $\textcircled{\small E}$ $\psi\iota\lambda\acute{o}\nu$, and $\textcircled{\small \Upsilon}$ $\psi\iota\lambda\acute{o}\nu$ are of Byzantine origin. They occur frequently in the rules of Chœrobosus and other, succeeding grammarians. (*CA. vol. 2. 1.*) $\mu\acute{\iota}\kappa\rho\acute{o}\nu$ means simply that the character \circ is smaller than the cursive ω , which, with reference to \circ , is called $\mu\acute{\epsilon}\gamma\alpha$. It is not true that O and Ω were once distinguished from each other by their size; for in the most ancient inscriptions in which O represents \circ , ω , $\circ\nu$, this distinction is not observed, except merely that the character O is often smaller than the other letters. And in inscriptions belonging to the Alexandrian and Roman periods, all the round letters, O , Ω , Θ , are often found smaller than the rest. (*F. pp. 45. 149. 230 – 232. B. n. 4694.*) What meaning the schoolmasters of Byzantium attached to $\psi\iota\lambda\acute{o}\nu$ in connection with E and Υ is unimportant to a correct notion of the power of these vowels.

PLATO, *Cratyl.* p. 393 D. $\tau\acute{\omega}\nu$ στοιχείων οἶσθα ὅτι ὀνόματα λέγομεν, ἀλλ' οὐκ αὐτὰ τὰ στοιχεῖα, πλὴν τεττάρων, τοῦ E καὶ τοῦ Υ καὶ τοῦ O καὶ τοῦ Ω .

Id. ibid. pp. 411 E. 416 B. 420 B.

Argument. ad Il. E , O , Υ , Ω :

E ἰ βάλλει Κυθήρειαν Ἀργά τε Τυδέος υἱός.

O ὕ Κρονίδης κεχόλωτο Ποσειδάωνι καὶ Ἥρῃ.

Υ μακάρων ἐνοπή καὶ φύλοπις οὐρανίωνων.

Ω νέκυν Ἑκτορα πατρί λύτρων πόρεν ὥκυν Ἀχιλλεύς.

PLUTARCH. Περὶ τοῦ Εἰ ἐν Δελφοῖς, pp. 384 *et seq.*

Id. de Garrulit. 21, p. 513 A. Λακωνίζειν ὡς ἐκεῖνοι Φιλίππου γράψαντος εἰ δέχονται τῇ πόλει αὐτὸν, εἰς χάρτην Οὐ μέγα γράψαντες ἀπέστειλαν.

Here Οὐ μέγα means simply a large O, not an Ω; Οὐ being the name of O. By this letter they meant the negative particle οὐ, *no*!

HERODIAN. *in BA.* pp. 798. 800.

ATHENAEUS, 10, 81, p. 454. Νεοπτόλεμος δ' ὁ Παριανὸς, ἐν τῷ Περὶ Ἐπιγραμμάτων, ἐν Χαλκηδόνι φησὶν ἐπὶ τοῦ Θρασυμάχου τοῦ σοφιστοῦ μνήματος ἐπιγεγράφθαι τόδε τὸ ἐπίγραμμα.

Τοῦνομα Θῆτα Ρῶ Ἄλφα Σὰν Ὑ Μῦ Ἄλφα Χι Οὐ Σὰν,
Πατρὶς Χαλκηδὼν, ἥ δὲ τέχνη σοφίη.

Id. 11, 30, p. 466 f. See above, § 5.

SUIDAS. Φιλοξένου γραμματίων. Μεταπεμπομένου δὲ Διονυσίου αὐτὸν καὶ ἀξιοῦντος καὶ διὰ γραμμάτων ἔλθειν, Φιλόξενος ἀντιγράφει μὲν οὐκ ἔγνω· λαβὼν δὲ βιβλίον τὸ Ο στοιχεῖον ἔγραψε μόνον πολλάκις ἐν αὐτῷ, διὰ τούτου δηλώσας ὅτι τὴν παράκλησιν διωθεῖται.

That is, by the letter O, pronounced OY, Philoxenus meant οὐ, *no*, *I will not come*.

BA. p. 709. Τὸ γὰρ ω τὸ μέγα συντεθειμένον ἐστὶν ἐκ δύο υν, ἥ ἐκ δύο οο.

This means that ω has the appearance of υν or οο united into one figure.

EUSTATH. *ad. Il.* 5, p. 507. Τὸ Ε στοιχεῖον Εἰ ἔλεγον οἱ παλαιοὶ προστιθέντες τὸ Ι, ἵνα τῇ διὰ διφθόγγου ἐκτάσει δύνωνται περισπᾶν καὶ αὐτὸ καθὰ καὶ τὰ ἄλλα στοιχεῖα. Τοιοῦτον δὲ ποιοῦσι καὶ ἐπὶ τοῦ μικροῦ Ο· καὶ ἐκεῖνο γὰρ διὰ τὴν αὐτὴν αἰτίαν Οὐ λέγουσιν.

Id. ad. Il. 15, p. 1001. Ὅτι δὲ τὸ Ο στοιχεῖον Οὐ ἐγράφτο, καθὰ καὶ τὸ Ε, Εἰ, δηλοῦσιν οἱ παλαιοί. Καὶ ἡ αἰτία, ἵνα στοιχιακῶς περισπῶνται καὶ αὐτά.

Id. ad. Il. 20, p. 1192, 20. Ὅτι δὲ τὸ Υ στοιχεῖον Ὑμ λέγουσιν οἱ Αἰολεῖς μετὰ ψιλῆς οἰκείῳ ἔθει, (ψιλωτικοὶ γὰρ εἰσιν ἐπὶ πᾶσιν,) ὑπὸ τῶν εἰδότην πᾶσι παραδέδοται.

HISTORY OF THE CONSONANTS.

THE ASPIRATES Θ, Φ, Χ.

§ 11.

THE prototype of Θ is the Phœnician *Teth*. It is found in some of the most ancient inscriptions. *B. nn.* 1, 27. 33. 40. *F. nn.* 1, *e.* 13. 16. *R. n.* 26.

The grammarians, imagining that Θ, being a rough mute, was invented at the same time with Φ and Χ, did not hesitate to affirm that its sound was once represented by *TH*.

Before the introduction of the characters Φ and Χ, the Greeks used *ΠΗ* for Φ, and *ΚΗ* for Χ, *Η* being equivalent to the rough breathing. *F. nn.* 1, *a.* *αρχαγεταις* for *Ἀρχαγέτας*. 5 *δελπηις* for *Δελφίς*. 12 *πηειδιπιδ..*, for *Φειδιπιδ..* *B. n.* 3 *εκπηαντοι, αμενπηες, επευκηομενος, γροπηον*, for *Ἐκφάντωι, ἀμεμφές, ἐπευχόμενος, γρόφων*.

The characters Φ and Χ are found in inscriptions written *βουστροφηδόν*, which shows their great antiquity. *B. nn.* 1 (*A.* 2, *p.* 10). 27. *F. p.* 22.

PLUTARCH. *Sympos. Probl.* 9, 2, 3, *p.* 738 C. Τὸ γὰρ Φῖ καὶ τὸ Χῖ τὸ μὲν ἔστι Πῖ, τὸ δὲ Κάππα δασυνόμενον.

MARIUS VICTORINUS, *p.* 2459. Graeci sequebantur sonum tantummodo literarum Θ Φ Χ; priusquam a Simonide invenirentur, exprimebant juxta T et juxta Π et Κ aspirationis notam H ponendo.

BA. *p.* 780 (*CA.* vol. 4, *p.* 325). Ἄν ἤθελον γράψαι λέξιν

ἔχουσιν τὴν ἐκφώνησιν τοῦ Θ, ἔγραφον ἀντὶ τοῦ Θ τὸ Τ, καὶ πρὸς τοῦτο ἐτίθεισαν τὸ παρ' αὐτοῖς σημεῖον τῆς δασείας, ἐνδεικνύμενοι ὅτι τοῦτο οὐκ ἔστι Τ ἀλλὰ Θ τῇ ἐκφωνήσει. Ἀντὶ δὲ τῆς ἐκφωνήσεως τοῦ Φ ἔγραφον τὸ Π, προστιθέντες, ὡς προεῖρηται, τὸ παρ' αὐτοῖς σημεῖον τῆς δασείας. Ἀντὶ δὲ τῆς τοῦ Χ ἐκφωνήσεως τὸ Κ ἔγραφον, τὸ σημεῖον τῆς δασείας προστιθέντες. [Ἦν δέ] τὰ παλαιὸν σύμβολον τῆς δασείας τὸ παρ' ἡμῖν νῦν Η.

THE DOUBLE CONSONANTS Ζ, Ξ, Ψ.

§ 12.

The prototype of Ζ is the Phœnician *Zayin*. The oldest inscriptions in which it is found are, *F. p.* 22. *n.* 52. *B. n.* 30. 165. Its name Ζῆτα occurs several times in Plato's *Cratylus*.

Before the introduction of Ξ and Ψ, the Æolians and Dorians used ΚΞ for Ξ, and ΠΨ for Ψ. *F. nn.* 1, *a.* ρεκσανορ for Ρηξάνωρ. 10 πσην for Ψήν. *B. n.* 3 δεκσαι for δέξαι.

The Bœotians used ΧΞ for Ξ. *B. n.* 1639 δεχσони for Δέξωνι.

In the Attic alphabet, ΧΞ and ΦΞ stand for Ξ and Ψ respectively. *B. nn.* 76 εδοχσεν for ἔδοξεν. 145 χσυνελεχσαμεν for ξυνελέξαμεν. 139 γρυφσ for γρύψ. 160 ανεγραφσαν for ἀνέγραψαν. 170 φσυχασ υπεδεχσατο, for ψυχὰς ὑπεδέξατο.

ΚΞΑΝΘΙΑΣ, for Ξανθίας, occurs in an Attic inscription recently published by the Archæological Society of Athens (*Pamphlet* 30, *n.* 1105).

The character Ξ is found in an inscription con-

sisting of a single line written from right to left.
B. n. 37 δέξεται. See, also, *F. p. 22.*

In the Ionic alphabet Ξ occupies the place of the Phœnician Samech, which corresponds to Σίγμα.

It has been supposed that the prototype of Ξ is the Phœnician *Tsade*, and that Ζ and Ξ, when they were adopted by the Greeks, exchanged names, Ζῆτα being a modification of Τσαδη, and Ξι of Ζαυ; also, that at first Ξ was not used, the Greeks having always avoided the combination ΤΞ; and that, in process of time, it became the representative of ΚΞ or ΧΞ.

This hypothesis, however, is contradicted by the fact, that the most ancient forms of the Greek Ξ in no way resemble the Phœnician *Tsade*. The name Ξι is formed after the analogy of Πι, Φι, Χι, Ψι; as to the name Ζῆτα, it is no more related to Τσαδη than its neighbors Βῆτα, Δέλτα, Ἡτα, Θῆτα, Ἰῶτα are, all of which end in -τα. "*Zade literae certum vestigium equidem apud Graecos non reperio.*" (*G. 1, 5, § 46, p. 67.*)

MARIUS VICTORINUS, *p. 2459.* Ξ autem varie, nunc per Κ et Σ, nunc per Γ et Σ [exprimebant]. Item Ψ nunc per ΒΞ, nunc per ΠΞ.

Victorinus evidently confounds the Latin *GS* and *BS* with the Greek Ξ and Ψ. The Greeks did not use the combinations ΓΞ, ΒΞ.

BA. p. 780. Ὅταν δὲ ᾤθελον συγγράφαι λέξιν ἔχουσιν τὴν τοῦ Ζ ἐκφώνησιν, ἔγραφον τὸ Σ καὶ Δ ἀντὶ τοῦ Ζ, ὥσπερ καὶ νῦν εὐρίσκο-

μεν παρὰ τοῖς Δωριεῦσιν. Ἀντὶ δὲ τοῦ Ξ, Κ καὶ Σ, ἀντὶ δὲ τοῦ Ψ, Π καὶ Σ.

THE CONSONANT Q.

§ 13.

Κόππα corresponds to the Phœnician *Qoph*. It was used by the Dorians, and was commonly followed by *O* with or without an intervening consonant.

B. nn. 7 Πάγων. 29 Κορινθόθεν. 31 Κοῖος. 32 *Κεῖρίλεω*, ἔθηκεν. 37 ὄργον. 166 *Λυγοδόρκας*. *F. n.* 1, *b.* Μαληγο . . . *p.* 46 Ἐγτωρ. *E.* 1, *pp.* 170 Συναγοσίων. 242 *Qροτ* . . . See, also, *F. p.* 22.

The original name of **Κόππα** must have been **Qόππα**, in accordance with the principle that the name of a Greek letter begins with that letter (*BA. p.* 800). The grammarians generally confounded it with **Κάππα**.

QUINTILIAN. 1, 4, 9. *Q*, cujus similis effectu specieque (nisi quod paullum a nostris obliquatur) *Koppa* apud Graecos nunc tantum in numero manet.

THE CONSONANTS Σίγμα AND Σάν.

§ 14.

1. Σίγμα and Σάν were originally two distinct letters, the former corresponding to *Samech*, and the latter to *Shin*.

The original form of Σίγμα was ζ, the proto-

type of ς , σ , and of the Latin S ; that of $\Sigma\acute{\alpha}\nu$ was ξ , Σ , or M .

In the most ancient Æolic and Bœotic inscriptions, only $\Sigma\acute{\iota}\gamma\mu\alpha$ is used; as, *C. I. n.* 11. 1599. $\Sigma\acute{\iota}\gamma\mu\alpha$ is also used in all the early Attic inscriptions; as, *B. n.* 165.

In the most ancient Doric inscriptions, $\Sigma\acute{\alpha}\nu$ is almost always used; as, *B. n.* 2.

In process of time, the Æolians and Ionians rejected the character S and substituted Σ in its place; hence, in inscriptions belonging to Ionia and Æolis, in later Bœotic, and in Attic inscriptions cut after the archonship of Euthymenes (§ 4), only Σ with its modifications is used.

The Ionians, after rejecting the character S ($\Sigma\acute{\iota}\gamma\mu\alpha$), gave its name to its successor, Σ ($\Sigma\acute{\alpha}\nu$). This explains the remark of Herodotus, that the letter called $\Sigma\acute{\iota}\gamma\mu\alpha$ by the Ionians was called $\Sigma\acute{\alpha}\nu$ by the Dorians.

2. When the alphabetical numeral system was adopted by the later Greeks, the then obsolete letters $\Delta\acute{\iota}\gamma\alpha\mu\mu\alpha$, Κόππα , and $\Sigma\acute{\alpha}\nu$ were employed to denote 6, 90, and 900, respectively. But since the character Σ , the true $\Sigma\acute{\alpha}\nu$, was at that time called $\Sigma\acute{\iota}\gamma\mu\alpha$ and denoted 200, the grammarians employed the Phœnician *Skin*, Π , \uparrow , Λ , λ , (called *Παρακίσμα* by some of them,) to denote 900. The first of these figures is found on an Egyptian papyrus (*F. p.* 352); the second, in The-

ognostus (*CA. vol. 2. 1, p. 151*); the third and fourth occur in the *Chronicon* of Eusebius.

The fourth character is a modification of the third, but is not found in any Phœnician inscription. As to the word *Σάνπι* or *Σαμπί*, often applied to this numeral, it owes its existence to *conjectural emendation*; that is, it is an editorial figment. (*Euseb. Chron. Scaliger. Animad. p. 116. Corsin. Not. Graec. pp. xxv. et seq. Bothe's Note to Aristoph. Nub. 23.*)

Κόππα and *Σάν* were used also as *brands* on horses, which, thus marked, were respectively called *Κοππαταίαι* or *Κοππαφόραι*, and *Σαμφόραι* or *Σαπφόραι*.

HERODOTUS, 1, 139. Τὰ οὐνόματά σφι ἔοντα ὁμοῖα τοῖσι σώμασι καὶ τῇ μεγαλοπρεπείῃ τελευτῶσι πάντα ἐς τωὺτὸ γράμμα, τὸ Δωριέες μὲν Σάν καλέουσι, Ἴωνες δὲ Σίγμα.

ATHENAEUS, 11, 30, p. 467 a. Τὸ δὲ Σάν ἀντὶ τοῦ Σίγμα Δωρικῶς εἰρήκασιν. Καὶ τοὺς ἵππους τοὺς τὸ Σ ἐγκεχαραγμένους ἔχοντας Σαμφόρας καλοῦσιν.

Id. 10, 81, p. 454. See above, § 10.

SCHOL. *ad Aristoph. Nub. 23.* Κοππατίας ἵππους ἐκάλουν οἷς ἐγκεχάρακτο τὸ Κ στοιχεῖον· ὥς Σαμφόρας τοὺς ἐγκεχαραγμένους τὸ Σ. Τὸ γὰρ Σ καὶ τὸ Ν χαρασσόμενον Σάν ἔλεγον. Αἱ δὲ χαράξεις αὗται καὶ μέχρι τοῦ νῦν σώζονται ἐπὶ τοῖς ἵπποις. Συνεξευγμένον γὰρ τοῦ Κ καὶ Σ τὸ σχῆμα τοῦ ἀριθμοῦ δύναται νοεῖσθαι, οὐ προηγείται τὸ Κ. Καὶ παρὰ γραμματικοῖς οὕτω διδάσκεται καὶ καλεῖται Κόππα ἐννεήκοντα.

SCHOL. *ad Aristoph. Nub. 122.* Σαπφόραι δὲ οἱ Σίγμα ἔχοντες περὶ τὸν μηρόν.

The Scholiast here confounds *Σάν* with *Σίγμα*.

R 91 (No
HESYCHIUS. Κοππατίας, ἵππος κεκαυμένος, ἐντετυπωμένον ἔχων
μείον τὸ Κόππα, ὃ ἐστὶ ἀπεστραμμένον Ρ καὶ Σ.

SUIDAS. Κοππατίας ἵππους ἐκάλουν οἷς ἐγκεχάρακται τὸ Κ
οιχείον· ὡς Σαμφόρας τοὺς ἐγκεχαυμένους τὸ Σ καὶ Ν χαρασ-
μενον ἄλλοις. Σάν γὰρ ἐκείνους ἔλεγον. Αἱ δὲ χαράξεις αὗται ἔτι
ἰ νῦν σώζονται ἐπὶ τοῖς ἵπποις. Συζευγνύμενον γὰρ τὸ Κ τῷ Σ τὸ
ῥημα τοῦ q ἀριθμοῦ κατανοεῖσθαι δίδωσιν, οὐ προηγείται τὸ Κ. Παρὰ
ρ τοῖς γραμματισταῖς οὕτω διδάσκεται, καὶ καλεῖται Κόππα ἐννεμή-
ντα.

Id. Σαμφόρας, εἶδος ἵππου ἐγκεχαυμένου τὸ Σ σημείον. Οἱ
Δωριεῖς τὸ Σ Σάν λέγουσι.

CA. vol. 4, p. 325. Γράμματα δὲ καὶ τὰ παρὰ Χαλδαίους καὶ
γυπτίους καὶ ἐτέροις τὸ Δίγαμμα καὶ τὸ Κόππα καὶ τὸ καλούμενον
ρακύσμα.

THE LATIN ALPHABET.

§ 15.

THE identity of the Greek and Latin alphabets
settled as follows :

First, The Latin letters are, as to *form*, the
same as the corresponding Greek letters found in
the most ancient inscriptions.

Secondly, The *relative position* of nearly all the
letters in the two alphabets is the same.

The *names*, however, of the Latin letters are
much simpler than those of their Greek proto-
types. Thus, the name of a vowel is the sound

represented by that vowel; the name of a semi-vowel is formed by prefixing an *E* to that semi-vowel; the name of a mute is formed by annexing an *E* to that mute. Except *iX* (that is, *Ei*), *Ka*, and *Qu*. (*Priscian*. 1, 7.)

Originally the Latin alphabet consisted of the following characters:

A B C D E F H I K L M N O P Q R S T V,

corresponding to the Greek

Α Β Γ Δ Ε Ζ Η Θ Ι Κ Λ Μ Ν Ο Π Ϟ Ϙ Τ Ϝ.

The letters used in the most flourishing times of the Latin language were the following:

Figure.	Name.	Figure.	Name.
A	A	N	eN
B	Be	O	O
C	Ce	P	Pe
D	De	Q	Qu
E	E	R	eR
F	eF	S	eS
G	Ge	T	Te
H	H	V	V
I	I	X	iX
K	Ka	Y	Y
L	eL	Z	
M	eM		

PART II.

PRONUNCIATION.

GREEK WORDS IN LATIN LETTERS.

§ 16.

IN treating of the manner in which the Romans wrote Greek words, we must distinguish between words originally common to both languages, and such as were adopted from the Greek in later times. A word of the former class is a variety of the same species, and does not afford as much aid in the determination of particular sounds, for it commonly undergoes a change, more or less perceptible, in pronunciation, as well as in spelling. But a fixed Greek word, introduced by Roman scholars, is naturally supposed to have represented the pronunciation of the radical portion of its prototype. In fact, we learn from the Latin grammarians that there were only two Greek sounds which their alphabet could not express, namely, *τ* and *ζ*.

1. *Vowels.*

A is represented by *A* ; Ἀνακρέων, Anacreon.

E — *E* short ; ἐπιθήκη, *ēpithēka*.

H — *E* long ; Στησίχορος, *Stēsichorus*.

I — *I* ; Ἴλιον, *Ilion*.

O — *O* short ; Ὀρχομενός, *Orchomenus*.

T was originally represented by the vowel *U* ; Ἀμφιτρύων, *Amphitruo*, Κύμη, *Cumae*, κύμινον, *cuminum*, Φρύγες, *Bruges*, Πύρρος, *Burrus*. The Romans adopted it in Greek words about the age of Cicero ; Κῦρος, *Cyrus*, Εὐρυδίκη, *Eurydice*. It has already been stated (§ 8) that the most ancient forms of the Greek *T* were *V* and *Y*. (*Cicer. Orator.* 48. *Quintilian.* 12, 10, 27. *Velius Longus*, p. 2215. *A. Cornutus*, p. 2286. *Priscian.* 1, 8. 9. 49.)

Ω — *O* long ; δῖωτος, *diōta*.

2. *Diphthongs.*

AI and *OI* are represented by *AE* and *OE* respectively ; Αἰσχύλος, *Aeschylus*, Οἶτη, *Oeta*. The Bœotians, also, sometimes used *AE* and *OE* for *AI* and *OI*. *B. nn.* 1599 Αἰσχροώνδας, Αἰγιτ..., Διώνύσοε. 1647 Πλαύχαι. (*Priscian.* 1, 53.) Sometimes these diphthongs retained their Greek form before a vowel, in which case the *I* had the power of a double consonant ; as Αἶας, *Aias*, Μαῖα, *Maia*, Τροία, *Troia*. (*Priscian.* 1, 50.)

AT and *ET* — *AU* and *EU* respectively; *Αὐτομέδων*, Automedon, *Ἀγαύη*, Agaue, *Εὐρώτας*, Euirotas, *Εὐάνδρος*, Euander. (*Terentianus Maurus*, 426. 427.)

EI — *I* long, or *E* long; *Σειρήν*, Siren, *Μήδεια*, Medea. Compare the later Bæotic *ἀτέλεια* for *ἀτέλεια*, and the later Doric *Νῆλος* for *Νεῖλος*. (*Priscian*. 1, 32. 54; 9, 6.)

OT — *U* long; *Οὐρανία*, Urania, *Ἐπίκουρος*, Epicūrus. (*Terentianus Maurus*, 428. 429. *Priscian*. 1, 36.)

TI — *YI*; *Ἄρπυιαι*, Harpyiae.

AI (long *A*) and *HI* were introduced when the *I* had ceased to be sounded; consequently they were represented by *A* long and *E* long respectively; *Θρᾶκες*, Thraces, *Θρήξ*, Threx, *Θρήισσα*, Thressa.

ŌI becomes *OE* in comoedus, comoedia, tragœdus, tragoedia, from *κωμωιδός*, *κωμωιδία*, *τραγωιδός*, *τραγωιδία*, which implies that these words were introduced when the *I* was audible. It becomes *O* long in ode, odeum, from *ὠδή*, *ὠιδεῖον*.

3. *Breathings.*

The smooth breathing has no appropriate sign in Latin. (*Donatus*, 1, 5, 3.)

The rough breathing is represented by *H*; *Ἦμος*, Homerus. (Compare §§ 6. 7.)

4. Consonants.

B represented by Β ; Βάκχος, Bacchus.

Γ — **G** ; Γηρυόνης, Geryones, Γλαῦκος, Glaucus. Before Γ, Κ, Χ, Ξ, it is represented by Ν. συγγραφή, syngrapha, ἔγκαυστος, encaustus, Ἀγχίσης, Anchises, Σφίγξ, Sphinx. The Greeks also very often wrote Ν for Γ before these letters. (See below.)

Δ — **D** ; Δημοσθένης, Demosthenes.

Z was at first represented by SS after the analogy of the Tarentine dialect ; κροταλίζω, crotalisso, μαλακίζω, malacisso, πυτίζω, pytisso or pitisso. Afterwards the Romans adopted it in Greek words. (Quintil. 12, 10, 27. Velius Longus, p. 2216. A. Cornutus, p. 2286. Diomed. 2, p. 417. Priscian. 1, 49.)

Θ — **TH** ; Θουκυδίδης, Thucydides.

Κ — **C** ; Κάστωρ, Castor, κῶνος, conus, Κηφισός, Cepissus, Κίρκη, Circē, ἀλκυνών, halcyon.

Λ — **L** ; Λυκούργος, Lycurgus.

Μ — **M** ; Μηριόνης, Meriones.

Ν — **N** ; Νάξος, Naxos.

Ξ — **X** ; Ξενοφῶν, Xenophon.

Π — **P** ; Πήλιον, Pelion.

Ρ — **R** ; Πρωτεύς, Proteus. At the beginning of a word, by RH ; ρήτωρ, rhetor. PP, in the middle of a word, are represented by RRH ; σκίρρος, scirrhus, Πύρρος, Pyrrhus. (Priscian. 1,

24.) According to Varro, R at the beginning of a word should be written without the H, the aspiration being left to pronunciation. (*A. Cornutus*, p. 2286.)

Σ — S; Σωκράτης, Socrates.

Τ — T; Τρίτων, Triton.

Φ — PH; Φινεύς, Phineus.

Χ — CH; Χίος, Chios.

Ψ, at the beginning of a word, by PS; Ψαμάθη, Psamathe. In the middle of a word, by PS, and sometimes by BS; ἀψίς, apsis or absis.

LATIN WORDS IN GREEK LETTERS.

§ 17.

POLYBIUS is the earliest Greek author of note in whose works Latin words written in Greek characters are to be found.

The Greeks not unfrequently modified Latin proper names; as Λεύκιος, Λεύκολλος, Πόπλιος, for Lucius, Lucullus, Publius. *Scipio* was written both Σκιπίων and Σκηπίων, because σκίπων was written also σκήπων.

1. Vowels.

A is represented by Α; Agrippa, Ἀγρίππας.

E short by *E*; E long by *H*; Decius, Δέκιος, Aurelius, Αὐρήλιος.

I, J — *I*; Priscus, Πρίσκος, Julius, Ἰούλιος.

O short by *O*; O long by *Ω*; Commodus, Κόμμοδος, Antonius, Ἀντώνιος.

V was both a vowel and a consonant. As a vowel it was represented by *T* or *OT*; Lucius, Λούκιος, Sulla, Σύλλας, Tullius, Τύλλιος. The modern character U usually represents the vowel-sound of this letter. As a consonant it was equivalent to *Faû* or Digamma, and was often called *Vau*. (*Priscian*. 1, 20; 6, 69.) As late as the time of Dionysius of Halicarnassus *OT* was regarded as its only representative; Valerius, Οὐαλέριος, Fulvius, Φουλούϊος, Servilius, Σερουτίλιος, Candavia, Κανδαούια, in Polybius. (§ 9.) When followed by A, E, or O, it was often changed into the vowel *T*; Octavius, Ὀκταύϊος, Aravacae, Ἀραανάκαι, in Polybius. *B. n.* 1732 Novembris, Νουενβρίων. (Compare § 9, 5.)

Soon after the age of Dionysius, it began to be represented also by *B*; Verus, Βῆρος, Valerius, Οὐαλέριος Βαλέριος, Nerva, Νερούας Νέρβας, Flavius, Φλαούϊος Φλαύϊος Φλάβιος, Severus, Σεουῆρος Σευῆρος Σεβῆρος, Livius, Λίβιος. (Compare § 9, 3.)

QUINTILIAN. 12, 10, 29. *Æolicae quoque litterae, qua servum cervumque dicimus, etiamsi forma a nobis repudiata est, vis tamen nos ipsa persequitur. Duras et illa syllabas facit, quae ad conjugendas demum subjectas sibi vocales est utilis,*

alias supervacua ; et *equos* hac et *equum* scribimus ; cum etiam ipsae hae vocales duae efficiant sonum, qualis apud Graecos nullus est, ideoque scribi illorum litteris non potest.

2. *Diphthongs.*

AE — AI ; Caesar, *Καῖσαρ*.

AU — AT ; Augustus, *Αὔγουστος*.

OE — OI ; Cloelia, *Κλοιλία*.

3. *Consonants.*

B — B ; Balbus, *Βάλβος*.

C — K ; Cicero, *Κικέρων*, Cato, *Κάτων*. This letter corresponds in form and relative position to the Greek *Γάμμα* (anciently written also C), but for a long time it had two sounds, namely, Γ and Κ. The character G, a modification of C, was, in later times, introduced as the representative of the sound Γ, in which case C retained only the sound Κ ; a sound that originally did not belong to it. In certain proper names, however, it still represented its old sound Γ ; thus, Caius, *Γάιος*, Cnaeus, or Cneus, *Γναῖος*. The new letter G stands between F and H, the place once occupied by Ζήτα. (*Plutarch. Quaest. Rom.* 54. *Quintil.* 1, 7, 28. 29. *Scaurus*, p. 2253. *Diomed.* 2, pp. 417. 418. 420.)

CH — X ; Gracchus, *Γράκχος*.

D — Δ ; Decius, *Δέκιος*.

F — Φ ; Felix, *Φήλιξ*, Festus, *Φήστος*. This letter corresponds in form and relative position

but not in power, to the Greek *Fav*. According to Quintilian it had a disagreeable *dental* sound. As compared with Φ , says Terentianus Maurus, it is *lenis atque hebes*. Priscian remarks that it was equivalent to Φ , except that the latter was uttered with compressed lips. We see now why Cicero's Greek witness could not pronounce the name of *Fundanius* properly.

QUINTILIAN. 1, 4, 14. About Cicero's Greek witness.

Id. 12, 10, 29. Nam et illa quae est sexta nostrarum, paene non humana voce, vel omnino non voce potius, inter discrimina dentium efflanda est.

TERENTIANUS MAURUS, 844 – 847. DIOMEDES, 2, p. 418.

PRISCIAN. 1, 14. Hoc tamen scire debemus, quod non fixis labris est pronuncianda *F*, quomodo *P* et *H*: atque hoc solum interest.

G — Γ; Granianus, Γρανιανός.

H — the rough breathing; Horatius, Ὁράτιος.

K — Κ; Kalendae, Καλανδαί. It was not much used by the Romans. When employed at all, it was followed by A; thus, Kaeso, Kalendae, Karthago, Kato, karissime, kalumnia, kanna, kaput, kave, kafeo, kaptus, khao, kassus, klaudus, kalleo, kausatus, klam. (*Quintil.* 1, 7, 10. *Scaurus*, pp. 2252. 2253. *Velius Longus*, p. 2218. *A. Gellius*, 18, 9. *Terentianus Maurus*, 797. *Donatus*, 1, 2, 3. *Maximus Victorinus*, 18. *Arsianus Messius*, ed. Lind. *Priscian.* 1, 14. 47.)

L — Λ; Lucius, Λούκιος. Pliny attributes three sounds to the Latin L, the *light*, the *full*,

and the *middle*. The first of these sounds was heard when L was doubled, and seems to have been no other than that of the Spanish *ll*.

PRISCIAN. 1, 38. *L* triplicem, ut Plinio videtur, sonum habet, exilem, quando geminatur secundo loco posita, ut *ille*, *Mettellus*; plenum, quando finit nomina vel syllabas, et quando aliquam habet ante se in eadem syllaba consonantem, ut *sol*, *silva*, *flavus*, *clarus*; medium in aliis, ut *lectus*, *lectum*.

M — *M*; Marcus, *Μάρκος*.

N — *N*; Numa, *Νουμάς*, Nero, *Νέρων*. Before a palatal, it was represented by *Γ*; Cincius, *Κίγκιος*, Ingauni, **Ιγγαυνοί*. According to Varro, the early Romans wrote G for N before C or G; as Agchises, agceps, aggulus. (*Priscian*. 1, 39.)

NIGIDIUS *apud A. Gell*. 19, 14. Inter literam *N* et *G* est alia vis, ut in nomine *anguis* et *angaria* et *ancorae* et *increpat* et *incurrit* et *ingenuus*. In omnibus enim his non verum *N* sed adulterinum ponitur. Nam *N* non esse lingua indicio est; nam si ea litera esset, lingua palatum tangeret.

P — *Π*; Pompeius, *Πομπήϊος*.

Q, the Latin *Κόππα*, was originally equivalent to CV (KW). Afterwards it was confounded with C (K); and in order to preserve its ancient pronunciation, the Romans appended to it the weak consonant V. So that QV represents the sound which once was denoted by Q alone. Thus, *quis* was originally written *qis* and sounded *cvis* or *kvis*. (*Quintil*. 1, 4, 9. *Velius Longus*, pp. 2218. 2231. *Terentianus Maurus*, 719. *Diomed*. 2, pp. 417. 420. *Priscian*. 1, 14. 15.)

The Greeks represented QV by ΚΟΥ, ΚΤ, or ΚΟ; Quirinus, Κουίρινος, Quintius, Κύντιος, Quintus, Κόιντος. Frequently for QVI they wrote ΚΤ without the Ι; Quirinus, Κυρίνος, Aquila, 'Ακύλας.

R — P; Roma, Ρώμη.

S — Σ; Sergius, Σέργιος.

T — Τ; Titus, Τίτος.

X — Ξ; Sextus, Σέξτος. X is one of the earlier forms of the Greek Ξι. In Latin it represents CS, or GS. (*Maximus Victorinus*, 18. *Dionemedes*, 2, p. 416. *Priscian*. 1, 14. 15.)

SHEMITIC WORDS IN GREEK LETTERS.

§ 18.

SHEMITIC words in Greek characters are found in the Septuagint and New Testament, in Josephus, and other later writers.

The names of the Hebrew letters occur in the Lamentations of Jeremiah, and in Origen's Hexapla.

Aleph, Αλεφ, corresponds to "Αλφα in name, form, and relative position; but to the *smooth breathing* in power.

Beth, Βηθ — Βήτα.

Gimel, Γιμελ, Γιμλ — Γάμμα.

Daleth, Δαλεθ, Δελθ — Δέλτα.

He, Η, corresponds to *Eī* in name, form, and relative position; but to the *rough breathing* in power.

Waw, Οωαν, is in every respect the same as *Faû*, or Δίγαμμα. The first letter of its name is represented by ΟΥ. After Α, Ε, Ω, it is changed into its corresponding vowel Υ; Ἡσαῦ, Αἰνάν, Δαυίδ, Λευί, Νινευή, Ἰωυάν. (Compare § 9, 5.) In the New Testament, Δαυίδ is written also Δαβίδ. In the Septuagint, the latter form appears only as a various reading, introduced most probably by the transcribers. (Compare § 9, 3.)

Zayin, Ζαιν, Ζαι — Ζήτα; Ζαχαρίας, Ζοροβάβελ. Ἑζρας is written also Ἑσδρας, after the Æolic manner.

Hheth, Ηθ, corresponds to Ἡτα in every respect, except power. It is represented by Χ in Χαρράν, Χάμ, Ραχήλ. Sometimes it is equivalent to the smooth breathing; Ἀερμών, Χαβώρ or Ἀβώρ, Γεών.

Teth, Τηθ — Θήτα. Regularly represented by Τ; Ἀραράτ.

Yod, Ιωδ, Ιωθ — Ἰώτα consonantal.

Kaph, Χαφ — Κάππα, or Χι.

Lamed, Λαμεδ, Λαβδ — Λάμβδα, Λάβδα.

Mem, Μημ — Μυ.

Nun, Νυν — Νυ.

Samech, Σαμεχ, Σαμχ — Σίγμα.

Ayin, Aw, corresponds to *Oû* in form and relative position. Its sound does not exist in Greek. Sometimes it is represented by *Γ*; *Γάζα, Γόμορρα, Γαιβάλ*.

Pe, Φη — *Πι, or Φι*.

Tsade, Τσαδη, Σαδη, is regularly represented by *Σ*; *Μελχισεδέκ, Σιών, Σαβαώθ*, its Shemitic sound being inadmissible in Greek.

Qoph, Κωφ — *Κόππα*. Represented by *Κ*; *Ίακώβ*.

Resh, Ρηχς, Ρης — *Ρω*.

Shin, Χσεν, Σεν — *Σάν*. Represented by *Σ*; *Σαμονήλ, Σαμφών, Ίσμαήλ*. Its sound SH cannot be expressed in Greek letters.

Taw, Ταυ, Θαν — *Ταû, or Θήτα*.

GREEK PRONUNCIATION.

§ 19.

EURIPIDES recognizes the division of the alphabetic sounds into *vowels* and *consonants*.

Plato speaks of *vowels*, *middle letters*, and *mutes*. A vowel has voice; a middle letter has sound, but not voice, as *Σ*; a mute has neither voice nor sound, as *Β*.

Aristotle divides the letters into *vowels*, *semi-*

vowels, and *mutes*. A vowel has an audible sound without a contact of the parts of the vocal organs, as Α, Ω; a semivowel has an audible sound with a contact of the parts of the vocal organs, as Σ, Ρ; a mute has no sound with a contact of the parts of the vocal organs, but becomes audible with the help of a vocal letter; as Γ, Δ.

The definitions of Dionysius of Halicarnassus and Sextus are essentially the same as those of their predecessors.

EURIPIDES, *Pal. frag.* 2.

Τὰ τῆς γε λήθης φάρμακ' ὀρθώσας μόνος,
 Ἄφωνα καὶ φωνοῦντα, συλλαβὰς τιθεῖς
 Ἐξεῦρον ἀνθρώποισι γράμματα' εἰδέναι.

PLATO, *Phileb.* p. 18 B. Δόγος ἐν Αἰγύπτῳ Θεοῦ τινα τοῦτον γενέσθαι λέγων, ὃς πρῶτος τὰ φωνήεντα ἐν τῷ ἀπείρῳ κατενόησεν οὐχ ἐν ὄντα ἀλλὰ πλείω, καὶ πάλιν ἕτερα φωνῆς μὲν οὐ, φθόγγου δὲ μετέχοντά τινος, ἀριθμὸν δὲ τινα τοῦτον εἶναι. Τρίτον δὲ εἶδος γραμμάτων διεστήσατο τὰ νῦν λεγόμενα ἄφωνα ἡμῖν. Τὸ δὲ μετὰ τοῦτο διήκει τὰ τε ἄφθογγα καὶ ἄφωνα μέχρι ἐνὸς ἐκάστου, καὶ τὰ φωνήεντα καὶ τὰ μέσα κατὰ τὸν αὐτὸν τρόπον, ἕως ἀριθμὸν αὐτῶν λαβὼν ἐνὶ τε ἐκάστῳ καὶ ξύμπασι στοιχεῖον ἐπωνόμασε.

Id. *Theæt.* p. 203 B. Τό τε Σίγμα τῶν ἀφώνων ἐστὶ, ψόφος τις μόνον, οἷον συριττούσης τῆς γλώττης. Τοῦ δ' αὖ Βῆτα οὔτε φωνή οὔτε ψόφος, οὐδὲ τῶν πλείστων στοιχείων.

Id. *Cratyl.* p. 424 C. Ἄρ' οὖν καὶ ἡμᾶς οὕτω δεῖ πρῶτον μὲν τὰ φωνήεντα διελέσθαι, ἔπειτα τῶν ἐτέρων κατὰ εἶδη τὰ τε ἄφωνα καὶ ἄφθογγα. οὕτωςί γάρ που λέγουσιν οἱ δεινοὶ περὶ τούτων. καὶ τὰ αὖ φωνήεντα μὲν οὐ, οὐ μέντοι γε ἄφθογγα.

ARISTOTEL. *Poet.* 20. Ταύτης δὲ [τῆς φωνῆς] μέρη τό τε φωνήεν καὶ τὸ ἡμίφωνον καὶ ἄφωνον. Ἔστι δὲ φωνήεν μὲν ἄνευ προσβολῆς ἔχον φωνὴν ἀκουστήν, οἷον τὸ Α καὶ τὸ Ω. ἡμίφωνον δὲ τὸ μετὰ προσ-

βολῆς ἔχον φωνὴν ἀκουστὴν, οἷον τὸ Σ καὶ τὸ Ρ · ἄφωνον δὲ τὸ μετὰ προσβολῆς καθ' αὐτὸ μὲν οὐδεμίαν ἔχον φωνήν, μετὰ δὲ τῶν ἐχόντων τινὰ φωνὴν γινόμενον ἀκουστὸν, οἷον τὸ Γ καὶ τὸ Δ. Ταῦτα δὲ διαφέρει σχήμασί τε τοῦ στόματος καὶ τόποις καὶ δασύτητι καὶ ψιλότητι καὶ μήκει καὶ βραχύτητι, ἔτι δὲ καὶ ὀξύτητι καὶ βαρύτητι καὶ τῷ μέσῳ.

DIONYS. HAL. *de Comp.* 14. Πρώτη μὲν [διαφορὰ], ὡς Ἀριστόφενος ὁ μουσικὸς ἀποφαίνεται, καθ' ἣν τὰ μὲν φωνὰς ἀποτελεῖ, τὰ δὲ ψόφους · φωνὰς μὲν τὰ λεγόμενα φωνήεντα, ψόφους δὲ τὰ λοιπὰ πάντα · Δευτέρα δὲ καθ' ἣν τῶν φωνηέντων [read γραμμάτων?] ἃ μὲν καθ' ἑαυτὰ ψόφους ὁποῖους δὴ τινὰς ἀποτελεῖν πέφυκε, ροῖζον ἢ συριγμόν ἢ ἀποπτυσμόν ἢ τοιούτων τινῶν ἄλλων ἥχων δηλωτικά. Ἄ δὲ ἐστὶν ἀπάσης ἁμοιρα φωνῆς καὶ ψόφου, καὶ οὐχ ὁδὰ τε ἡχεῖσθαι καθ' ἑαυτὰ, ταῦτα μὲν ἄφωναί τινες ἐκάλεσαν, θάτερα δὲ ἡμίφωνα. Οἱ δὲ τριχῆι νείμαντες τὰς πρώτας τε καὶ στοιχειώδεις φωνῆς δυνάμεις, φωνήεντα μὲν ἐκάλεσαν ὅσα καὶ καθ' ἑαυτὰ φωνεῖται καὶ μεθ' ἑτέρων καὶ ἔστιν αὐτοτελῆ · ἡμίφωνα δὲ, ὅσα μετὰ τῶν φωνηέντων κρείττον ἐκφέρεται, καθ' ἑαυτὰ δὲ χεῖρόν τε καὶ οὐκ αὐτοτελῶς · ἄφωνα δὲ ὅσα οὔτε τὰς τελείας οὔτε τὰς ἡμιτελείας φωνὰς ἔχει καθ' ἑαυτὰ, μεθ' ἑτέρων δὲ ἐκφωνεῖται.

MAXIMUS VICTORINUS, 18. Vocales sunt quae per se effe-runtur, et per se syllabam faciunt, id est, sine alterius admini-culo; quippe *B, C*, caeteraeque hujusmodi, nisi consonent, proferri non possunt. Consonantium species sunt duae, quaedam sunt semivocales, quaedam mutae. Semivocales sunt, quae per se syllabam facere non possunt, quarum sunt septem, *F L M N R S X*. Mutae sunt quae ipsae per se proferri non possunt, neque per se syllabam facere; quarum sunt novem, *B C D G H K P Q T*.

PRISCIAN. 1, 10. Reliquae sunt mutae, ut quibusdam vide-tur, numero novem, *B C D G H K P Q T*. Et sunt qui non bene hoc nomen putant eas accepisse, cum hae quoque pars sunt vocis: qui nesciunt quod ad comparationem bene sonan-tium ita sint nominatae. Sic igitur etiam mutas, non quae omnino voce carent, sed quae exiguam partem vocis habent.

PRONUNCIATION OF THE VOWELS.

§ 20.

There are five long vowels, and five corresponding short ones. The latter differ from the former in time, but not in power.

Long *A H I Ω τ*.

Short *Α Ε Ι Ο Ϝ*.

1. *Pronunciation of A.*

A long, like *a* in *far, farm, calm*.

A short, like *a* in *past, grasp, nearly*.

Long *A*, according to Dionysius of Halicarnassus, is the richest of all vowel sounds. Its utterance requires the mouth to be opened as much as possible, and the breath to move in the direction of the palate.

2. *Pronunciation of H, E.*

H like French *ê*, as in *fête*.

E like short *e*, as in *sell, ferry, nearly*.

(a) *H* bears the same relation to *E* that *Ω* does to *O*. And in all the early alphabets, *E* and *O* were either long or short (§ 5).

(b) Dionysius places *H* next to long *A* in richness of sound, and refers its formation to the *root of the tongue*. He adds, that it requires the mouth to be opened moderately.

(c) Sextus and Terentianus Maurus distinctly

assert that *E* and *H* differ from each other in time, but not in kind.

(d) Plato intimates that the Athenian women said *ιμέρα* instead of *ήμερα*, from which he seems to infer that originally the Greeks said *ιμέρα*, which afterwards was changed into *έμέρα*, and finally into *ήμερα*, inasmuch as *H* and *E* were regarded as more *magnificent* than *I*. In this passage, *φωνήν*, *sound*, and *έκάλουν*, *called*, relate to the *pronunciation*, and not to the spelling of *ήμερα*; which shows that the first syllable of *ήμερα* differed in sound from the corresponding syllable in *ιμέρα*; that is, *H*, as such, was not pronounced like *I*, as such.

In another place he calls *A* and *H* *great* letters, evidently with reference to their noble sounds.

(e) Herodian remarks that it is incorrect to say *νήστης* for *νήστις*; thus showing that, in his time, *H* was different from *I* in sound. (*CA. vol. 3, p. 248.*)

(f) Priscian nowhere intimates that *H* had any other sound than that of *E* long.

3. *Pronunciation of Ω, Ο.*

Ω like *oh*, or French *eau* in *beau*.

Ο like *o* in *confuse*, nearly.

(a) The utterance of *Ω*, Dionysius says, requires the mouth to be *rounded*, and the breath to strike upon the extremity of the lips.

(b) Herodian observes that it is an error to *say* φιλοπότης for φιλοπότης; which proves that Ω was distinguished from O in pronunciation. (CA. vol. 3, p. 254.)

4. Pronunciation of τ.

τ long, like French *u*. But when it formed the second element of a diphthong, it had the sound of *oo* in *book*. (See below.)

(a) Dionysius informs us that τ is less full than Ω, inasmuch as its utterance requires a greater *compression of the lips*, which causes its sound to be *choked* and *narrow*.

(b) The fact that the Romans adopted τ in Greek words shows that their U could not express its peculiar, though kindred, sound.

(c) Cornutus thinks it unnecessary to write an H before Y (the Latin τ) at the beginning of a word, for, in that case, this vowel contains the aspiration within itself. This must refer to the breathing which the great compression of the lips naturally generates.

(f) Heraclides and others say that the Bœotians prefixed an O to τ, in which case Oτ was long or short, according as the original τ was long or short; that is, the O in this pseudo-diphthong is nothing more than an orthographical mark. Thus, in οὔλα for ὕλη, Oτ is long because

the *τ* was long; in *οὔδωρ* for *ὔδωρ*, *Οτ* is short because the *τ* was short.

Priscian observes that this orthography was employed by the Æolians (meaning the Bœotians and perhaps the Laconians), in order to denote the Æolic sound of *τ*, which was the same as that of the Latin *U*. Now this Æolic sound of *τ* could have been no other than that of the English *oo* in *moon*, *book*, which sound, after *τ* became the representative of the sound now given to the French *u*, the Bœotians indicated by prefixing an *O* to it. (Compare French *u* and *ou*.)

In the Bœotic inscriptions, *τ*, in radical syllables, is commonly (not always) preceded by an *O*; thus, *ἀσουλία*, *τούχα*, *σούν*, *σούγγραφος*, *σουγχωρείσι*, *Διονούσιος*, *Πουβέας*, *Πουθιάς*.

Hesychius attributes to the Laconians a number of words written with an *O* before the original *τ*; from which it is inferred that they sometimes followed the example of the Bœotians in this particular, although the fact is not formally recognized by the grammarians. Thus,

καρούα, *κάρυα*. *Λάκωνες*.

μουκηρόβας, *καρνοκατάκτης*.

μύκηρος, *ἀμνυδαλή*. *τινὲς δὲ μῆλα κάρυα*. Compare *Athen.* 2, 40, p. 53 b. *μουκήρους γὰρ Λάκωνες καλοῦσι τὰ ἀμύδαλα*.

μουταί, *σκώληκες οἱ γενόμενοι ἐν τοῖς κρέασιν*. For *μνῖαι*.

According to Marius Victorinus, the Romans sometimes prefixed an O to U long for the sake of marking its quantity; as *loumen* for *lumen*. (Compare the next paragraph, c.)

5. Pronunciation of I.

I long, like *i* in *machine*, *marine*, *police*.

I short, like *i* in *mirror*, *miss*, *fill*, nearly.

(a) Dionysius regards *I* as the least of the vowels. The teeth are chiefly employed in its formation.

(b) According to Plato, *I* is adapted to *tenuity* or *subtilty*.

(c) Nigidius, Quintilian, and others, state that the Greeks prefixed an *E* silent to *I* long when they wished to indicate its quantity. The pseudodiphthong *EI* arising from this practice frequently occurs in ancient inscriptions of authority; as, *B. nn.* 170 Ποτειδαίας. 1688, 40 ἀποτείση. 186 Εἰσίδοτος. *R. nn.* 42 Διειτρέφους. 115 Τειθράσιος. 123 Τεισίμαχος.

In inscriptions written after the commencement of our era, *EI* is often found even for *I* short; as *B. nn.* 254 γυμνασειαρχήσας. 353 Τείτου. Such barbarisms, however, are not recognized by the ancient grammarians.

The Romans often imitated the Greeks in this absurd mode of marking the quantity of *I*.

PLATO, *Cratyl.* p. 418 C. Οἱ παλαιοὶ οἱ ἡμέτεροι τῷ Ἰῶτα καὶ

τῷ Δέλτα εὖ μάλα ἐχρῶντο, καὶ οὐχ ἦκιστα αἱ γυναῖκες αἴπερ μάλιστα τὴν ἀρχαίαν φωνὴν σώζουσι. Νῦν δὲ ἀντὶ μὲν τοῦ Ἰῶτα ἢ Εἰ ἢ Ἡτα μεταστρέφουσιν, ἀντὶ δὲ τοῦ Δέλτα Ζῆτα, ὥς δὴ μεγαλοπρεπέστερα ὄντα. ΕΡΜ. Πῶς δὴ; ΣΩ. Οἶον, οἱ μὲν ἀρχαιότατοι ἰμέραν τὴν ἡμέραν ἐκάλουν, οἱ δὲ ἐμέραν, οἱ δὲ νῦν ἡμέραν.

Id. ibid. p. 426 E. Τῷ δ' αὖ Ι [φαίνεται μοι κατακεχρησθαι ὁ τὰ ὀνόματα τιθέμενος] πρὸς τὰ λεπτὰ πάντα, ἃ δὴ μάλιστα διὰ πάντων ἴοι ἂν. Διὰ ταῦτα τὸ ἰέναι καὶ τὸ ἴεσθαι διὰ τοῦ Ι ἀπομιμείται.

Id. ibid. p. 427 C. Τὸ δ' αὖ Α τῷ μεγάλῳ ἀπέδωκε, καὶ τῷ μήκει τὸ Η, ὅτι μεγάλα τὰ γράμματα. Εἰς δὲ τὸ γογγύλον τοῦ Ο δεόμενος σημείου, τοῦτο πλείστον αὐτῷ εἰς τὸ ὄνομα ἐνέκერσε.

NIGIDIUS *apud A. Gell.* 19, 14. Graecos non tantae inscitiae arcesso qui ΟΥ ex Ο et Υ scripserunt, quantae qui ΕΙ ex Ε et Ι: illud enim inopia fecerunt; hoc nulla re subacti.

DIONYS. HAL. *de Compos.* 14. Τὰ μὲν μακρὰ καὶ τῶν διχρόνων ὅσα μακρῶς λέγεται τεταμένον λαμβάνει καὶ διηνεκῇ τὸν αὐλὸν τοῦ πνεύματος· τὰ δὲ βραχέα, ἢ βραχέως λεγόμενα, ἐξ ἀποκοπῆς τε καὶ μιᾷ πληγῇ πνεύματος, καὶ τῆς ἀρτηρίας ἐπὶ βραχὺ κινηθείσης, ἐκφέρεται. Τούτων δὲ κράτιστα μὲν ἐστὶ καὶ φωνὴν ἡδίστην ἀποτελεῖ τὰ τε μακρὰ καὶ τῶν διχρόνων ὅσα μηκύνεται κατὰ τὴν ἐκφορὰν, ὅτι πολλὴν ἡχείται χρόνον, καὶ τοῦ πνεύματος οὐ κατακόπτει τὸν τόνον· χεῖρὼς δὲ τὰ βραχέα, ἢ τὰ βραχέως λεγόμενα, ὅτι μικρόφωνα τ' ἐστὶ καὶ σπαδονίζει τὸν ἦχον. Αὐτῶν δὲ τῶν μακρῶν εὐφωνότατον τὸ Α, ὅταν ἐκτείνηται· λέγεται γὰρ ἀνοιγομένου τοῦ στόματος ἐπὶ πλείστον, καὶ τοῦ πνεύματος ἄνω φερομένου πρὸς τὸν οὐρανόν. Δεύτερον δὲ τὸ Η, ὅτι κάτω περὶ τὴν βάσιν τῆς γλώσσης ἐρείδει τὸν ἦχον ἀκόλουθον, ἀλλ' οὐκ ἄνω, καὶ μετρίως ἀνοιγομένου τοῦ στόματος. Τρίτον δὲ τὸ Ω· στρογγύλλεται τε γὰρ ἐν αὐτῷ τὸ στόμα, καὶ περιστέλλει τὰ χεῖλη, τὴν τε πληγὴν τὸ πνεῦμα περὶ τὸ ἀκροστόμιον ποιεῖται. Ἔστι δὲ ἦττον τούτου τὸ Υ· περὶ γὰρ αὐτὰ τὰ χεῖλη συστολῆς γενομένης ἀξιολόγου πνίγεται καὶ στενὸς ἐκπίπτει ὁ ἦχος. Ἔστι δὲ πάντων ἔσχατον τὸ Ι· περὶ τοὺς ὀδόντας τε γὰρ ἡ κρότησις τοῦ πνεύματος γίνεται, μικρὸν ἀνοιγομένου τοῦ στόματος καὶ οὐκ ἐπιλαμπρυνόντων τῶν χειλέων τὸν ἦχον.

Τῶν δὲ βραχέων οὐδέτερον μὲν εὐῆχον, ἦττον δὲ δυσηχὲς τὸ Ο· διίστησι γὰρ τὸ στόμα κρείττον θατέρου, τὴν δὲ πληγὴν λαμβάνει περὶ τὴν ἀρτηρίαν μᾶλλον.

QUINTILIAN. 1, 7, 15. Diutius duravit ut *E, I*, jugendis eadem ratione qua Graeci *EI* uterentur. Quod quidem cum supervacuum est, quia *I* tam longae quam brevis naturam habet, tum incommodum aliquando.

HERACLIDES *apud Eustath. ad Il.* 1, 10. Νόσος νοῦσος κατὰ τοὺς Ἴωνας μῆκύνοντας τὸ Ο τῇ προσλήψει τοῦ Υ, οὐπερ ἀνάπαλιν οἱ Βοιωτοὶ ποιοῦσι κατὰ τὴν Ἑρακλείδου παράδοσιν προστιθέντες αὐτοὶ τῷ Υ διχρόνῳ τὸ μικρὸν Ο· καὶ βραχυνομένου μὲν φησι βραχύνοντες, μῆκυνομένου δὲ μῆκύνοντες, τὸ ὕλη οὕλη λέγοντες καὶ τὸ ὕδωρ οὕδωρ.

TERENTIANUS MAURUS, 450 – 453.

Litteram nanque *E* videmus esse ad Ἥτα proximam,

Sicut *O* et *Ω* videntur esse vicina sibi :

Temporum momenta distant, non soni nativitas.

A. CORNUTUS, *p.* 2286, *Putsch*. Illud etiam non video quare huic litterae [τῷ Υ] *H* adspirationis gratia admoveam. Ipsa enim per se adspirativae est, et quocumque vocabulo primum locum habuerit, adspiratur, *Yacintus, Yllus, Ymettus*.

SEXTUS, *advers. Gram.* 5. Εἰ γὰρ τὸ Α κατ' αὐτοὺς ἐκτεινόμενον καὶ συσσελλόμενον οὐχ ἕτερόν ἐστι στοιχείον, ἀλλ' ἐν κοινόν, ὡσαύτως δὲ καὶ τὸ Ι καὶ τὸ Υ, ἀκολουθήσει καὶ τὸ Ε καὶ τὸ Η ἐν εἶναι στοιχείον κατὰ τὴν αὐτὴν δύναμιν κοινόν· ἡ γὰρ αὐτὴ δύναμις ἐπ' ἀμφοτέρων ἐστί. Καὶ συσταλὲν μὲν τὸ Η γίνεται Ε, ἐκταθὲν δὲ τὸ Ε γίνεται Η. Κατὰ δὲ τὸν αὐτὸν τρόπον καὶ τὸ Ο καὶ τὸ Ω μίᾳ στοιχείου γενήσεται φύσις κοινὴ ἐκτάσει καὶ συστολῇ διαφέρονσα, ἐπεὶ περ τὸ μὲν Ω μακρόν ἐστι τὸ Ο, τὸ δὲ Ω βραχὺ ἐστὶν Ο. Τυφλώττουσιν οὖν οἱ γραμματικοὶ καὶ τὸ ἀκολουθον οὐ συνωρῶσι λέγοντες ἑπτὰ φωνάεντα τυγχάνειν, πέντε μόνον ὄντων πρὸς τὴν φύσιν.

MARIUS VICTORINUS, *p.* 2459. Sic *U*, quod apud illos junctum *O* litterae, *Y* [read *OY*] facit syllabam, nostri etiam quoties ejusdem soni longa syllaba scribenda esset, et ipsam adjungebant *O* litterae. Inde scriptum legitis *Loucetios, nountios, et loumen*, et c.

PRISCIAN. 1, 32. In vocalibus quoque sunt affines *E*, cor-
6*

repta vel producta, cum EI diphthongo, qua veteres Latini utebantur ubique loco *I* longae.

Id. 1, 36. Ponitur haec eadem litera [*U*] in Graecis nominibus modo loco OY diphthongi, ut *Musa* pro Μούσα, modo pro O correpta ut *Homerus* pro Ὅμηρος, pro eadem producta, ut *fur* pro φῶρ. In plerisque tamen Aeoles secuti hoc facimus. Illi enim θουγάτηρ pro θυγάτηρ, OY corripientes, vel magis Y sono *U* soliti sunt pronuntiare, ideoque ascribunt O non ut diphthongum faciant, sed ut sonum Y Aeolicum ostendant. Quod nos secuti, *U* modo correptam modo productam habemus, quamvis videatur OY diphthongi sonum habere.

Id. -1, 50. *I* quoque apud antiquos post *E* ponebatur et EI diphthongum faciebat, quam pro omni *I* longa scribebant more antiquo Graecorum.

BA. p. 779. Δέον δέ ἐστι ζητῆσαι, εἰ ἄρα τὸ Ο τὸ προτιθέμενον παρὰ Βοιωτοῖς τοῦ Υ δύναμιν ἔχει στοιχείου. Καὶ ἔστιν εἰπεῖν ὅτι οὐκ ἔχει δύναμιν στοιχείου, ἀλλὰ φθόγγος μόνον ἐστίν. Ὅτι γὰρ οὐκ ἔχει δύναμιν στοιχείου δῆλον, εἴγε προσερχομένου τοῦ Υ τὸν αὐτὸν χρόνον φυλάττει. Καὶ γὰρ ὥσπερ τὸ κύνεσ συνεσταλμένον ἔχει τὸ Υ, οὕτω καὶ τὸ κούνεσ συνεσταλμένην ἔχει τὴν ΚΟΥ συλλαβήν.

PRONUNCIATION OF THE DIPHTHONGS.

§ 21.

SEVEN diphthongs begin with a short vowel, and six with a long one. The latter differ from the former only in the prolongation of the first vowel.

AI AT, EI ET, OI OT, TI, two short vowels.

AI AT, HI HT, OI OT, —, a long and a short.

(a) When a diphthong arose from *synæresis*, the presumption is that the elementary sounds

remained unchanged. Thus *AI* in the monosyllable *παῖς* differed from *AI* in the dissyllable *παῖς* in the greater rapidity of utterance, but not in the nature of its component parts.

The same remark applies to *Ἀίδης* *Ἀιδης*, *αἰκής* *αἰκής*, *αἶσσω* *ἄισσω*, *ἤξα* *ἦξα*, *αὔω* *αῦω*, *γραῖδιον* *γράιδιον*, *δαῖος* *δᾶιος*, *δήιος* *δῆιος*, *δαῖς* *δαίς*, *εὖ* *εὔ*, *Θρήξ* *Θρήξ*, *κλής* *κλής*, *οἷς* *οἷς*, *οἶμαι* *οἶμαι*, *ῶξα* *ῶξα*, *ραῖδιος* *ράιδιος*.

Also to the endings of the *dative singular*, *αι*, *ηι*, *ωι*, *οι*, *ει*, *υι*.

Also to the endings *αιος* *αια* *αιον*, *ειος* *εια* *ειον*, *εινος* *εινη* *εινον*, *οιος* *οια* *οιον*, *ωιος* *ωια* *ωιον*, *ειδης*, *ειδιον*, of substantives and adjectives.

(b) In verbs beginning with a diphthong, the augment affected only the first vowel, which shows that that vowel was distinctly heard; as *αἰτῶ* *ἤιτον*, *ἄισσω* *ἦξα*, *αὔξω* *ἡῦξον*, *εἰκάζω* *ἦκασμαι*, *εὔδω* *ἡῦδον*, *οἰκῶ* *ῶικουν*.

(c) Contractions like the following necessarily imply that both vowels were audible: *καὶ ἐγώ* *κἀγώ*, *καὶ εἶτα* *κᾶιτα*, *τοῦ αὐτέου* *τῶντέου*, *οἱ ἄλλοι* *ᾶλλοι*, *οἱ ἐμοὶ* *δύμοι*, *τιμάεις* *τιμαῖς*, *τιμάης* *τιμαῖς*, *τιμαῖς* *τίμῳς*, *δηλόεις* *δηλοῖς*, *δηλόης* *δηλοῖς*, *διδόης* *διδῶς*.

(d) According to Trypho, Herodian, and others, the Æolians sometimes *resolved* a diphthong into its component parts, even when it did not arise from synæresis. Thus, *κόϊλος* *κοῖλου*, *Προῖ-*

του, οἰωνῶν, ὄϊδα, for κοῖλος κοῖλου, Προίτου, οἰωνῶν, σύνοιδα. Phrynichus says that it is incorrect to say ροῖδιον for ροῖδιον. Now, had *OI* been nothing more than *I*, no resolution would have been possible, for *I* is an indivisible sound. (*Trypho*, § 15. *Herodian. in CA.* 4, p. 416. *Id. Περὶ μονήρους λέξεως, in D. vol. 1, p. 24.*)

(e) Priscian states that a diphthong consists of *two sounds*, each component part retaining its proper sound.

(f) Sextus calls *AI, EI, OT*, and everything of a similar nature, *elements*; but at the same time he says that they *differ in power from ordinary vowels*. If by “*πᾶν δὲ τῆς ὁμοίας φύσεως ἐστί*” he means *all* the diphthongs, then we must admit that *AT, ET, and OT* were, in his time, sounded not unlike the English *au* and French *eu* and *ou* respectively. It is observed here that this author is referred to the first half of the third century.

1. Pronunciation of *AI, OI*.

AI like *i* in *spice, fine, kite*, nearly.

OI like *oi* in *spoil, point*, nearly.

(a) The *I* in these diphthongs, at the end of a word, had an *obscure* or *weak* sound; that is, it was scarcely audible: but when it was a characteristic letter, as in the dative or optative, its sound was *clear* or *strong*. Hence, with respect

to accent, they are generally short in all the dialects except the Doric.

(b) Thucydides, in his description of the plague of Athens, says :

“ In their affliction they remembered this verse among other things, as was natural they should, — the most aged persons saying that it had been sung of old :

A Dorian war shall come, and plague with it.

Now there arose a dispute among men, some asserting that the calamity mentioned in the verse had not been called *λοιμός* by the ancients, but *λιμός*. Naturally enough, however, the opinion prevailed at this time that the word said was *λοιμός*; for men adapted their recollections to what they then were suffering. But should another Dorian war happen after this, and with it a famine (*λιμός*), they will, I think, as a matter of course, sing the verse accordingly.”

Here *αἰδεσθαι*, *to be sung*, *ὀνομάσθαι*, *to have been named*, *εἰρήσθαι*, *to have been said*, and *ᾄσονται*, *they will sing*, have reference to the *sound* of the word in question; which shows that *λοιμός* was readily distinguished from *λιμός* in ordinary *pronunciation*, as well as in *singing*. Had the dispute been about the *orthography* of *λοιμός* or *λιμός*, Thucydides would have informed us of the fact.

(c) Plato derives *δίκαιον* from *δια-ῖόν* by simply

inserting *K*; which implies that *AI* was composed of two sounds.

(d) According to Quintilian, some of the early Romans pronounced the Latin diphthong *AE* like *AI* in all cases; just as the Greeks sounded their *AI*.

(e) Herodian maintains that, although the vowel *O* is longer than the vowel *E*, the diphthong *EI* is longer than the diphthong *OI*, because the former is composed of two kindred sounds, whereas *O* and *I*, being dissimilar sounds, do not coalesce so easily, and consequently, in the diphthong *OI*, the vowel *O* does not show all its power. From this we learn that in the time of Herodian (*A. D.* 161), the first elementary sound of *OI* was a weak *O*. (*BA. p.* 798.)

(f) Phrynichus observes that we must not say *Ἀλκαῖκόν* with one *I*, but *Ἀλκαυκόν* with two, which implies that, in his time (say *A. D.* 175), *AI* had two sounds.

(g) Terentianus Maurus says that the ancient Romans often wrote *Caesones* with a *K* (799):

Saepe Kaesones notabant hac vetusti littera.

Now the Romans used *K* only before the vowel *A* (§ 17). The orthography *Kaesones*, therefore, implies that the Latin *AE* was not a mere commixture of *A* and *E*, but a true diphthong. And as *AE* corresponds to the Greek *AI*, the inference

is that the first elementary sound of the latter also was *A*.

(h) Melampus compares the sound of the Digamma to that of *OT* and *OI*, which shows that, in his time, the *O* in the latter diphthong was not a silent letter. (§ 9.)

(i) Priscian expressly states that *AE* and *OE* were each composed of two sounds. He says further, that when the Greek *AI* and *OI* were not Latinized into *AE* and *OE*, the *I* was changed into its corresponding consonant. Thus, *Aἴας*, *Maía*, *Τροία* were written *Aias*, *Maia*, *Troia*, and pronounced *A-yax*, *Ma-ya*, *Tro-ya*.

(k) The later Greek grammarians speak of *AI* whose *I* is sounded, and of *AI* whose *I* is a silent letter; which shows that *AI* (short *A*) consisted of two elementary sounds.

2. Pronunciation of *AT*, *ET*.

AT like *ou* in *house*, *pound*.

ET like *eh-oo* rapidly uttered.

(a) The Romans represented these diphthongs by *AU* and *EU*, not by *AY* and *EY*; which shows that *T*, in this case, was not sounded in the same manner as when it stood by itself.

(b) Terentianus Maurus says that the *U* in the Roman diphthongs *AU* and *EU* is a vowel corresponding to the Greek *T* in *AT* and *ET*. He observes further, that *AU* in *aurum* sounded like the Greek *AT* in *αὔριον*.

(c) The classical Greeks never wrote $\alpha\psi$ and $\epsilon\psi$ for $\alpha\nu\sigma$ and $\epsilon\nu\sigma$, which would have been the case, had these diphthongs been the same as $\alpha\beta$ or $\alpha\phi$, $\epsilon\beta$ or $\epsilon\phi$, respectively.

3. *Pronunciation of EI, OT.*

EI like *eh-ee* rapidly uttered. Later, like *ee* in *meet, see, feel*.

OT like *oh-oo* rapidly uttered. Later, like French *ou*, Italian or Spanish *u*, or like *oo* in *soon, moon, pool*.

(a) In the early alphabets, *EI* and *OT*, when they originated in prolongation, were represented simply by *E* and *O* respectively. But when the second element was a radical or characteristic letter, they were always written in full. This seems to imply that, in the former case, the sound of the first element predominated; in the latter, the second element was as distinctly heard as the first. (§ 5, 2. 3. 4.)

During the Alexandrian period, the usual orthography prevailed in all cases; from which it may be inferred, that, during that period, both the elements of these diphthongs were sounded, without regard to their origin. (§ 5, 5.)

(b) The Romans represented *OT* by *U* long. On the other hand, the Greeks represented the sound of the Latin *U* commonly by the diphthong *OT*. This seems to imply that, during the Ro-

man period, the *O* was a silent letter. Terentianus Maurus, however, intimates that the sound of *U* was not absolutely the same as that of *OT* (*U complet hunc SATIS sonum*).

(c) We have already seen that, in the time of Dionysius of Halicarnassus, *OT* could represent the sound of *Faû*; which shows that, when this author flourished, *OT* was essentially a monophthong. (§ 9.)

(d) Herodian says that *I* is closely related to *E*; hence *EI*, the name of *E*, has the sound of *I*. This proves that, in his time, the diphthong *EI* could not have differed much from long *I*. In another place he says that [the name of] every letter, except *E*, begins with the sound of that letter; which shows that in *Oû*, the name of *O*, the first letter also was audible. See also Quintilian, 1, 7, 11, above quoted (§ 5).

(e) Marius Victorinus remarks that when *E* and *I* were united, the syllable sounded, in a manner, like *I* long.

(f) In the following epigram of Callimachus, *ναίχι* rhymes with *ἔχει*, which proves similarity but not identity of sound. If *ναίχι* was pronounced precisely like *ἔχει*, then a trochee cannot be said to differ from an iambus; which is untenable.

CALLIM. *Epigram.* 29:

Δυσανίη, σὺ δὲ ναίχι καλὸς καλὸς· ἀλλὰ πρὶν εἰπεῖν
Τοῦτο σαφῶς, Ἥχώ φησί τις, Ἄλλος ἔχει.

(g) The later Dorians lengthened the first vowel of *EI* and dropped the second, even when it was a characteristic letter. The Bœotians, on the other hand, often (not always) lengthened the *I* and dropped the *E*, but only when the *I* was a characteristic letter. The Romans sometimes followed the former, and sometimes the latter. All which shows that in the leading dialect both vowels were audible.

4. *Pronunciation of TI.*

TI like *ui* in *swing*, nearly.

(a) The Romans represented it by *YI*, which shows that the *T* was audible.

(b) Herodian's rule is that both the vowels of *TI* should be uttered in such a manner as to form but one syllable.

(c) Terentianus Maurus says that *TI* was sounded like *ui* in *cui* [the dative of *quis*].

(d) Priscian intimates that *T* in this diphthong was a weak consonant, and compares it to *u* in *suadeo*, *suavis*, *suesco*, *suetus*. This shows that, as late as the fifth century, the first element also was audible.

(e) The dialectic form *μνῑται* for *μνῑται* shows that the *T*, in this diphthong, retained its peculiar sound. (§ 20, 4.)

5. Pronunciation of *AI* (long *A*), *HI*, *ΩI*.

AI like *ah-e* rapidly uttered. Later like *A* long.

HI like *êh-e* rapidly uttered. Later like *H*.

ΩI like *ōh-e* rapidly uttered. Later like *Ω*.

In all the earlier inscriptions, these diphthongs are regularly written in full, *AI*, *HI*, *ΩI*. In those belonging to the first century before Christ, they are very often written without the *I*. In those cut after the commencement of our era, and in manuscripts, the *I* is generally omitted. Strabo recognizes the omission of the *I* in the dative singular, and intimates that, in his time, it was a silent letter. Quintilian speaks of its being silent also in the middle of a word. From these facts it is inferred that, during the classical period, the *I* in these diphthongs was not a mere appendage. As early, however, as the first century before Christ, it was commonly neglected in pronunciation.

The early modern Greeks employed the orthography *α, η, ω*, instead of the original *αι, ηι, ωι*, merely because they did not pronounce the *I*. This gave rise to the expression *ὑπογεγραμμένον Ἰῶτα*, *Iota subscriptum*. Herodian, Chæroboscus, and Eustathius use *προσγράφειν*, and Quintilian uses *adscribere*, with reference to it.

In manuscripts written before the fourteenth

century, this *I*, if written at all, is annexed to the preceding vowel; thus, *αι, ηι, ωι*.

The expressions, *δίφθογγοι κύριαι*, *proper diphthongs*, and *δίφθογγοι καταχρηστικάι*, *improper diphthongs*, and *ὑπογεγραμμένον Ἰῶτα*, occur in the latest Byzantine grammarians.

The transcribers of the Byzantine period committed a number of errors with reference to these diphthongs, some of which still remain uncorrected.

(a) When two words were to be united, by *crasis*, into one, if the first ended in a diphthong, the second vowel (*ι, υ*) of that diphthong was dropped before the contraction was effected. (*CA. vol. 4, pp. 200. 343.*)

B. nn. 29 *τάργειοι* for *τοὶ Ἀργεῖοι*. 39 *τῶπόλλωνι* for *τῶι Ἀπόλλωνι*. 2554, 181 *κᾶρτεμιν* for *καὶ Ἄρτεμιν*. 3044 *τήπαρῆι* for *τῇ ἐπαρῇ*. 3047 *κῆπαινέομεν* for *καὶ ἐπαινέομεν*.

The *I* of course retains its place when it belongs to the second of the syllables to be contracted; as *καῖτα* for *καὶ εἶτα*.

(b) The adverbial endings *-ησι, -ασι* were written without the *I*. (*CA. vol. 2. 1. p. 157.*) *B. nn.* 87. 158 *A. 2374, 3 Ἀθήνησι*. *F. p. 111 Ἀγρυλῆσι, Ἀλωπεκῆσι*. *R. n. 53 Ὀλυμπίασι*.

(c) The Attic ending *-ης* of the contracted nominative plural of nouns in *-εύς* was, according to Terentianus Maurus (453 – 455), written simply *-ης*:

Inde vertunt hanc in Ἡρα saepe diphthongon Graii,
 Quando, quos ἱππεῖς solebant aut Ἀχαρνεῖς dicere,
 Laevigant, ἱππῆςque potius aut Ἀχαρνῆς nominant.

See also *BA.* p. 1195. In an inscription containing the name of Nausinicus, the archon (see above, § 4, p. 15), this ending is simply *HΣ*; thus, *Col.* 1, l. 61 Χαλκιδῆς; l. 62 Ἑρετριῆς; l. 69 Διῆς. *Col.* 2, l. 12 Ἑσ]τιαῆς; ll. 19. 26 Καρθαιεσ, Διεσ, for Καρθαιῆς, Διῆς (§ 5, 1). The same inscription contains ἄλλωι τρόπωι, Σαμοθραικ, Θράικης, which show that the *I* was not accidentally omitted in -ης. In another Attic inscription, *B. n.* 455, we have πλυνῆς. Eustathius, however, asserts (p. 50) that this ending was written with an *I* after the *H*.

(d) The aorist of verbs in -αῖνω, -αίρω ended in -ηνα or -ανα, -ηρα or -αρα, without the *I*, because this tense is formed from the simple root. (*CA.* vol. 4, p. 173.) *B. nn.* 175 πημάνας. 1907, α, ἄρατο. 2374, 28 ἀνέφηνεν. 2953 ἐπάρει, ἐπάρας.

(e) The second perfects δέδηα, μέμνηα, πέφνηα, σέσηρα, κέχνηα were written without the *I*, because they come from the roots δα-, μαν-, φαν-, σαρ-, χαν-. (*CA.* vol. 4, p. 190.)

(f) The perfect of αἶρω is ἦρκα, ἦρμαι. *B. n.* 3137, 42 ἦρθω.

(g) The ending of the contracted infinitive of verbs in -άω was written -ᾶν -ῆν, not -ᾶιν ῆιν. (*CA.* vol. 2. 1, p. 310.) *B. nn.* 2569 τιμᾶν. 2919 περι]ορᾶν.

2058 B, 53 κατασκευᾶν (future). 3069, 2 ζῆν. R. n. 250, 19. 20 εἶν.

In the following cases the *I* is improperly omitted.

(h) In the adverbial datives in *HI*, Doric *AI*. (*Eustath. pp.* 173. 1251.) B. nn. 2483 ὅπαι κα χρήζη, Doric. 2554, 56 ὅπηι.

(i) In the Epic ending -ηφι of the dative. (*CA. vol.* 1. 1, p. 360.)

(k) In the epic ending -ησι of the third person singular of the subjunctive active. (*Eustath. p.* 1006.)

(l) In φῆις from φημί. (*Eustath. p.* 1578. *CA. vols.* 1. 1, p. 432; 2. 1, p. 311.)

(m) In the endings -ῶιος, ῶιον, contracted from -ῳίος, -ῳίον. (*CA. vol.* 2. 1, pp. 49. 286.) B. nn. 2236 Κῳίος. 3538, 19 μητρῳίος. R. nn. 22 πατρῳίης. 132 Κῳίοι.

(n) In ζῳιον, animal. (*CA. vol.* 2. 1, p. 216.) B. nn. 2448, I, 12 ζῳιον. 3538 φυσίζωιος.

(o) In ζῳιδιον, the diminutive of ζῳιον. (*CA. vol.* 2. 1, p. 121.)

(p) In ἑρωιδιός, heron. (*CA. vol.* 2. 1, p. 214.)

(q) In κλήζω, contracted from κλητίζω, which comes from κλετίζω. The contracted εὐ-κλείζω, with an *EI*, occurs in an inscription (*B. n.* 175), which Boeckh unnecessarily changes into εὐ-κλήιζω. The original root is κλεF-, found in the derivative κλέFος (§ 9, 1).

(r) In *πρῶρα*, *prow*. (CA. vol. 2. 1, p. 196.)

(s) In *σώζω*, *to save*. B. nn. 2448, I, 7 *σωίζο- μέναι* dative. 5775, 30 *κατεσώξαμες*. Hesychius has *ἀπέσοιξεν*.

(t) In *χρήζω*, *to need, want*. B. n. 2483 *ῥπαι κα χρήζη*.

(u) *᾽ὄν*, *egg*, *ovum*, was written also *ὠόν*. (CA. vol. 2. 1, p. 281.)

6. Pronunciation of *AT* (long *A*), *HT*, *OT*.

AT like *ah-oo* rapidly uttered.

HT like *éh-ro* rapidly uttered.

OT like *ō-oo* rapidly uttered.

These diphthongs are of rare occurrence. *OT* is not found in radical syllables; it owes its existence entirely to contraction; thus, *πρωῦδᾶν* for *προαυδᾶν*, *ὠντός* for *ὁ αὐτός*, *ωῦριπίδη* for *ὦ Εὐριπίδη*.

As to *ων* in the Ionic words *εμεωντου*, *σεωντου*, *εωντου*, *θωνμα*, and *τρωνμα*, for *ἐμαντοῦ*, *σεαντοῦ*, *ἐαντοῦ*, *θαῦμα*, *τραῦμα*, they, according to the grammarians, constitute two syllables, *ωῦ*; thus, *ἐμεωῦτοῦ*, *σεωῦτοῦ*, *έωῦτοῦ*, *θῶῦμα*, *τρώῦμα*; and the analogy of such Ionic forms as *βασιλητή*, *σημήιον*, *κληῖς*, *ἦῦς*, *ἦῦτε*, *γρηῦς*, *Μητων*, seems to add to the weight of the traditional orthography.

THUCYD. 2, 54. Ἐν δὲ τῷ κακῷ, οἷα εἰκός, ἀνεμνήσθησαν καὶ τοῦδε τοῦ ἔπου φάσκοντες οἱ πρεσβύτεροι πάλαι διδασθαι,

Ἦξει Δωριακὸς πόλεμος καὶ λοιμὸς ἀμ' αὐτῷ.

Ἐγένετο μὲν οὖν ἔρις τοῖς ἀνθρώποις μὴ λοιμὸν ὀνομάσθαι ἐν τῷ

ἔπει ὑπὸ τῶν παλαιῶν, ἀλλὰ λιμὸν, ἐνίκησε δὲ ἐπὶ τοῦ παρόντος εἰκότως, λοιμὸν εἰρῆσθαι· οἱ γὰρ ἄνθρωποι πρὸς ἃ ἔπασχον τὴν μῆμην ἐποιούντο. Ἦν δέ γε, οἶμαι, ποτὲ ἄλλος πόλεμος καταλάβῃ Δωρικὸς τοῦδε ὕστερος, καὶ ξυμβῇ γενέσθαι λιμὸν, κατὰ τὸ εἰκὸς οὕτως αἰσονται.

PLATO, *Cratyl.* p. 412 D, E. Ἐπεὶ δ' οὖν ἐπιτροπεύει τὰ ἄλλα πάντα διὰ τὸν, τοῦτο τὸ ὄνομα ἐκλήθη ὁρθῶς δίκαιον, εὐστομίας ἕνεκα τὴν τοῦ Κ δύναμιν προσλαβόν.

STRABO, 14, 1, 41, p. 648 (*Casaub.*). Πολλοὶ γὰρ χωρὶς τοῦ Ι γράφουσι τὰς δοτικὰς, καὶ ἐκβάλλουσιν γε τὸ ἕθος φυσικὴν αἰτίαν οὐκ ἔχον.

QUINTIL. 1, 7, 18. *AI* syllabam, cujus secundam nunc *E* literam ponimus, varie per *A* et *I* efferebant, quidam semper ut Graeci: quidam singulariter tantum, cum in dativum vel genitivum casum incidissent, unde *pictai vestis*, et *aulai*, Virgilius, amantissimus vetustatis, carminibus inseruit.

Id. 1, 7, 17. Sicut in Graecis accidit adjectione *I* literae quam non solum dativis casibus in parte ultima adscribunt, sed quibusdam etiam interponunt, ut in *ληιστήι*, quia etymologia ex divisione inter syllabas facta desideret eam literam.

HERODIAN. in *BA.* pp. 798. 800. Τοῦτο γὰρ [τὸ Ι] συγγενεῖαν τινα ἔχει πρὸς τὸ Ε, καὶ δείκνυσιν ἐκ τοῦ τὴν ἐκφώνησιν τοῦ Ι εἶναι ὄνομα τοῦ Ε γράμματος.

Id. in *CA.* vol. 3, p. 251. Πλημμελοῦσιν οἱ διαιροῦντες τὸ μνῖα, νῖός, τρισύλλαβον· δεῖ γὰρ ἀμφότερα συναρεῖν λόγῳ τοιούτῳ· ὅτι τὸ Ι μετὰ τοῦ Υ ταπτόμενον οὐδέποτε διαιρεῖται οὐδὲ χωρίζεται κατ' αὐτὸ, ἀλλὰ τὸ Υ συνεκφωνεῖται καὶ γίνεται μία δίφθογγος ἡ ΥΙ.

PHRYNICHUS. Ἀλκαϊκὸν δις μα, δι' ἐνὸς Ι οὐ χρὴ λέγειν, ἀλλ' ἐν τοῖν δυοῖν, Ἀλκαϊκόν, τροχαικόν, καὶ ἀρχαικόν.

SEXTUS, *advers. Gram.* 5. Καὶ ἀναστροφῶς ἔσεσθαι τινα φασὶν ἔνιοι τῶν φιλοσόφων πλείονα στοιχεῖα διάφορον ἔχοντα δύναμιν τῶν συνήθως παραδιδόμενων, οἷον καὶ τὸ ΑΙ καὶ τὸ ΟΥ καὶ πᾶν ὃ τῆς ὁμοίας ἐστὶ φύσεως. Τὸ γὰρ στοιχεῖον κριτέον μάλιστα ὅτι στοιχεῖόν ἐστιν ἐκ τοῦ ἀσύνθετον καὶ μονοποιὸν ἔχειν φθόγγον, οἷός ἐστιν ὁ τοῦ Α καὶ Ε καὶ Ο καὶ τῶν λοιπῶν. Ἐπεὶ οὖν ὁ τοῦ ΑΙ καὶ ΕΙ φθόγγος

ἀπλοῦς ἐστὶ καὶ μονοειδής, ἔσται καὶ ταῦτα στοιχεῖα. Τεκμήριον δὲ τῆς ἀπλότητος καὶ μονοειδείας τὸ λεχθυσόμενον. Ὁ μὲν γὰρ σύνθετος φθόγγος οὐχ οἷος ἀπαρχῆς προσπίπτει τῇ αἰσθήσει τοιοῦτος ἄχρι τέλους παραμένειν πέφυκεν, ἀλλὰ κατὰ παράτασιν ἵταιριοῦνται. Ὁ δὲ ἀπλοῦς καὶ ὄντως τοῦ στοιχείου λόγον ἔχων τούναντίον ἀπ' ἀρχῆς μέχρι τέλους ἀμετάβολος ἐστίν. Οἷον τοῦ μὲν ΡΑ φθόγγου ἐν παρατάσει προφερομένου δῆλον ὡς οὐχ ὡσαύτως αὐτοῦ κατὰ τὴν πρώτην πρόπτωσιν ἀντιλήψεται ἢ αἰσθήσει καὶ κατὰ τὴν τελευταίαν, ἀλλὰ κατ' ἀρχὰς μὲν ὑπὸ τῆς Ρ ἐκφωνήσεως κινηθήσεται, μεταυθὺς δὲ ἐξαφανισθείσης αὐτῆς, ἐλικρινοῦς τῆς τοῦ Α δυνάμεως ποιήσεται τὴν ἀντιληψιν. Ὅθεν οὐκ ἂν εἴη στοιχεῖον τὸ ΡΑ, καὶ πᾶν ἐοικὸς αὐτῷ. Εἰ δὲ τὸν τοῦ ΑΙ φθόγγον λέγοιεν, οὐδὲν ἔσται τοιοῦτον, ἀλλ' οἷον ἀπ' ἀρχῆς ἐξακούεται τῆς φωνῆς ἰδίωμα τοιοῦτον καὶ ἐπὶ τέλει. Ὅστε στοιχεῖον ἔσται τὸ ΑΙ. Τούτου δὲ οὕτως ἔχοντος, ἐπεὶ καὶ ὁ τοῦ ΕΙ φθόγγος καὶ ὁ τοῦ ΟΥ μονοειδής καὶ ἀσύνθετος καὶ ἀμετάβολος ἐξ ἀρχῆς ἄχρι τέλους λαμβάνεται, ἔσται καὶ οὗτος στοιχεῖον.

Id. ibid. 9. Τὴν γὰρ ὀρθογραφίαν φασιν ἐν τρισὶ κείσθαι τρόποις, ποσότητι, ποιότητι, μερισμῷ. Ποσότητι μὲν οὖν ὅταν ζητῶμεν εἰ ταῖς δοτικαῖς προσθετόν τὸ Ι. Καὶ εὐχάλινον καὶ εὐώδινας τῷ Ι μόνον γραπτέον ἢ τῇ ΕΙ.

TERENTIANUS MAURUS, 426 – 429.

AU et *EU* cum copulamus, *U* secundum jungimus,

In vicem Graecae : quod *Y* subdita vocalis *U*.

Graeca diphthongos sed *OY* literis nostris vacat :

Sola vocalis quod *U* complet hunc satis sonum.

Id. ibid. 481. 482.

AU tamen capere videtur saepe productum sonum,

Auspices cum dico et *aurum*, sive Graecus *αἰριον*.

Id. ibid. 768 :

Γνῖα cum dicunt et *νῖας* tale quid *cui* sonet.

MARIUS VICTORINUS, p. 2458. *I* autem longum quodammodo sonat cum et *E* et *I* junctum est.

PRISCIAN. 1, 37. *S* quoque antecedente et sequente *A* vel *E*, hoc idem saepe fit, ut *suadeo*, *suavis*, *suesco*, *suetus*, quod apud Aeoles quoque *YI* saepe patitur, et amittit vim literae in

metro, ut Sappho, *ἀλλὰ τινδ' ἐλθετε ποτισατ' ἐρωτα*. Similiter *πῆλυ* disyllabum invenitur apud eosdem, cum *YI* non est diphthongus.

Id. 1, 50. Diphthongi autem dicuntur, quod binos *phthongos*, hoc est, voces comprehendunt. Nam singulae vocales suas voces habent, ut *AE* diphthongus, quando a poetis per diaeresin profertur, secundum Graecos per *A* et *I* scribitur, ut *aulai*, *pictai*, pro *aulae*, *pictae*. In Graecis vero, quotiens hujusmodi fit apud nos diaeresis penultima syllabae, *I* pro duplici consonante accipitur, ut *Maja Mala*, *Ajax Aias*.

Id. 1, 53. *OE* est quando per diaeresin profertur in Graecis nominibus et Graecam servat scripturam. Pro *O* enim et *I* ponitur, quae tamen, sicut supradictum est, locum obtinet duplicis consonantis, ut *Troja* pro *Τροία*, *Maja* pro *Μαία*.

Id. De XII. vers. *Aen.* 33. Cur *Troja*, cum apud Graecos diphthongum *OI* in priore habeat syllaba non servat etiam apud nos? Quia in disyllabis, in quibus *AI* vel *OI* diphthongi antecedunt apud Graecos sequente vocali, diaeresin solent facere Latini plerumque, et pro consonante duplici accipere *I*, et eam a priore subtrahere syllaba, et adjungere sequenti.

BA. p. 1186, § 27. Δεῖ δὲ γινώσκειν ὅτι οἱ μὲν γραμματικοὶ ὡς πρὸς τὴν ἐκφώνησιν ἀποβλέποντες λέγουσι τὸ *I* ἀνεκφώνητον εἶναι, ἡνίκα εὔρεθῇ ἢ μετὰ τοῦ *A* μακροῦ ἢ μετὰ τοῦ *H* ἢ μετὰ τοῦ *Ω*, οἷον τῶι Χρύσει, τῶι σοφῶι, τῶι Αἰνείαι· οἱ δὲ μουσικοὶ καὶ τῆς ἀκριβείας φροντίζοντες λέγουσιν ὅτι ἐκφωνεῖται μὲν οὐκ ἐξακούεται δὲ διὰ τὸ μέγεθος τῶν μακρῶν φωνήεντων.

CHOEROBOSCUS, in *BA.* p. 1214. Αἱ μὲν γὰρ αὐτῶν [τῶν διφθόγγων] εἰσὶ κατ' ἐπικράτειαν, αἱ δὲ κατὰ διέξοδον, αἱ δὲ κατὰ κῶσιν. Καὶ κατὰ μὲν ἐπικράτειάν εἰσιν ὡς ἐπὶ τῆς *HI* διφθόγγου τῆς διὰ τοῦ *H* καὶ *I* καὶ τῆς *OI* καὶ τῆς *AI* τῆς ἐχούσης τὸ *I* ἀνεκφώνητον· ἐπὶ τούτων γὰρ ὁ φθόγγος τοῦ ἐνὸς φωνήεντος ἐπικρατεῖ καὶ αὐτὸς ἐξακούεται, οἷον τῇ Ἑλένῃ, τῶι καλῶι, τῇ Μηδεῖαι. Κατὰ κῶσιν δὲ εἰσιν ὡς ἐπὶ τῆς *OY* διφθόγγου καὶ τῆς *AY* καὶ τῆς *EY*· ἐπὶ τούτων γὰρ συγκρινῶσιν ἑαυτὰ τὰ δύο φωνήεντα καὶ ἀποτελοῦσι μίαν φωνὴν ἀρμόζουσαν τοῖς δύο φωνήεσιν, οἷον αὐλός, εὐχομαι, οὗτος. Κατὰ διέξοδον δὲ εἰσιν ὡς ἐπὶ τῆς *HY* διφθόγγου τῆς διὰ τοῦ *H* καὶ *Y* καὶ τῆς *OY* τῆς διὰ τοῦ

Ω καὶ Υ καὶ τῆς ΥΙ τῆς διὰ τοῦ Υ καὶ Ι · ἐπὶ τούτων γὰρ χωρὶς ἀκούεται ὁ φθόγγος τοῦ ἐνὸς φωνήεντος, τοῦτ' ἔστι τοῦ Ι, καὶ χωρὶς τοῦ ἐτέρου φωνήεντος, οἷον νηυσίν, υἱός, αὐτός,

Εὐτέ μιν αὐτὸς ἀνὴρ,

ἀντὶ τοῦ ὁ αὐτός. Ἐπειδὴ οὖν ἡ ΑΙ δίφθογγος ἡ ἐκφωνοῦσα τὸ Ι καὶ ἡ ΟΙ δίφθογγος οὔτε κατ' ἐπικράτειάν εἰσιν οὔτε κατὰ διέξοδον οὔτε κατὰ κρᾶσιν, εἰκότως, ὥσπερ ἔστερήθησαν τοῦ ιδιώματος τῶν διφθόγγων, ἔστερήθησαν καὶ τοῦ χρόνου τοῦ παρεπομένου ταῖς διφθόγγοις.

EUSTATHIUS, p. 563. Ἐν δὲ τῷ αὐτὸς ἀνὴρ, ἤγουν ὁ αὐτός, ἰστέον ὅτι ἡ ΩΥ δίφθογγος ἐν μιᾷ μὲν λέξει κατὰ διάλυσιν προάγεται διεξοδικῶς, οἷον θαυμάσιος ὁ θαυμάσιος, καὶ ἐωυτοῦ ἀντὶ τοῦ ἑαυτοῦ · ἐν δὲ δυοὶ λέξεσι κέκρται τῷ λόγῳ τῆς συναίρεσεως.

BREATHINGS.

§ 22.

The weak consonant, or breathing, the utterance of which requires the vocal organs to be put in the same position as that required for the utterance of a vowel, is the corresponding consonant, or breathing, of that vowel. Thus,

A has the *smooth breathing* ˆ for its corresponding consonant, which in the Shemitic alphabet is denoted by *Aleph*.

E has the *rough breathing* ˆ, corresponding to the Shemitic *He*, the Latin or English *H*.

H has the Shemitic *Hheth*. In Greek, the rough breathing is the only substitute for it.

I, as a consonant, is equivalent to the Shemitic *Yod*, the Latin *J*, or the English *Y* in *ye, yet, yarn, you*.

O and Ω have each the Shemitic *Ayin*. In Greek, *Faû* is the only substitute for it.

T has *Faû*, corresponding to the Shemitic *Waw*, the Latin V, and the English W in *wood*, *wine*.

These consonants or breathings can be used before any vowel; still they coalesce more readily with their cognate vowel-sounds. Thus, in *ye* and *wood*, the transition from *y* and *w* to *e* and *oo*, respectively, is almost imperceptible; not so in *yarn*, *yonder*, *you*, *wagon*, *weep*, *wise*.

SYNIZESIS, OR SYNEPHONESIS.

§ 23.

Synizesis, or, *Synecphonesis*, is when, for the sake of reducing two syllables into one, a vowel standing before another vowel is changed into its corresponding consonant or breathing; which is frequently the case with *E* and *I*; as,

IL. 1, 1. 15; 2, 651. 811; 23, 882.

Μῆνιν ἄειδε, θεὰ, Πηληϊάδεω Ἀχιλῆος.

Χρυσέωι ἀνὰ σκήπτρῳ, καὶ ἐλίσσεται πάντας Ἀχαιοῦς.

Μηριόνης τ', ἀτάλαντος Ἐνυαλίῳ ἀνδρείφοντι.

Ἔστι δέ τις προπάρουθε πόλιος αἰπεία κολώνη.

Ἄν δ' ἄρα Μηριόνης πελέκεας δέκα πάντας ἄειρεν.

CORRINA, frag. 14.

Ἥ διανεκῶς εὐδεις· οὐ γὰρ πάρος ἦσθα, Κόριννα.

PRAXILLA apud Hephaest. § 9.

Ἄλλὰ τεὸν οὔποτε θυμὸν ἐνὶ στήθεσσιν ἔπειθον.

AESCHYL. Sep. 2.

Ὅστις φυλάσσει πρᾶγος ἐν πρύμνῃ πόλεως.

Synizesis must not be confounded with contraction, properly so called; for a contracted syllable is always long by nature, but in case of synizesis the weak consonant produces no effect upon the quantity of the syllables between which it stands. Thus *τέον*, in the example from Praxilla, is a short monosyllable.

PRONUNCIATION OF THE CONSONANTS.

§ 24.

1. Pronunciation of the Semivowels *Λ*, *Μ*, *Ν*, *Ρ*, *Σ*.

Λ like *l* in *alarm*, *lest*, *loose*, *lute*. Plato attributes *gliding* or *slipperiness* to *Λ*. The sweetest of semivowels, says Dionysius of Halicarnassus.

Μ like *m* as in *mar*, *more*, *meet*, *moon*. The lips being pressed, the sound passes through the nostrils.

Ν like *n* as in *nard*, *net*, *noose*. The tongue checks the motion of the breath, and the sound is thus transferred to the nostrils.

Ρ like *r*, but stronger. In the utterance of *Ρ*, the tongue, according to Plato, is in a state of *vibration*. A rough letter, according to Dionysius. A scholiast intimates that *Ρ* at the beginning of a word was *doubled in pronunciation*, or *rolled*. Hence, when, in the formation of a compound word, it came to stand between two vowels, it was

doubled also in writing; as *ρίπτω* (*ρρίπτω*), *ἔ-ρριπτον*, *ρώννυμι* (*ρρώννυμι*), *ἄ-ρρωστος*. The later grammarians denoted this peculiarity by placing the rough breathing over it. And when it was doubled in the middle of a word, they wrote the smooth breathing over the first one, and the rough over the second. They wrote also the smooth breathing over *P* preceded by a smooth mute, and the rough over *P* preceded by a rough mute. According to Priscian, the Greeks originally placed the breathing after the *P*, thus, *Pʰ*.

It was a question among the Latin grammarians whether the *H* should be placed before or after *R*. And Varro thought it unnecessary to write it at all in connection with *R* (§ 16, 4).

We observe here that, in inscriptions, the breathings never accompany *P*.

Σ like *s* in *salve*, *so*, *see*, *soon*. Plato calls *Σ* an *aspirate*, and Dionysius, a *hissing* and *disagreeable* letter. This shows that it was not pronounced like *z* (a *buzzing* letter).

2. Pronunciation of the Semivowel *Z*.

Z-like *z*, but stronger. Dionysius of Halicarnassus and his successors tell us that *Z* is composed of *Σ* and *Δ*; which seems to imply that it is a mere abbreviation for *ΣΔ*, and that it makes no difference whether *Z* or the combination *ΣΔ* is employed. But this is highly improbable, for the following reasons.

(a) Dionysius himself, in his description of the sound of *Z*, contradicts the notion that it is nothing but $\Sigma\Delta$. He says that it pleases the ear more than the other double consonants; that Ξ and Ψ respectively begin with *K* and *Π* and end in a hissing, but *Z* is *gently aspirated*, and is the noblest of the family. He does not assert that its elementary sounds are Σ and Δ .

Plato also calls *Z* an *aspirate letter*, and classes it with Φ , Σ , and Ψ (in his time pronounced $\Phi\Sigma$).

(b) Velius Longus denies that it is a double consonant. He adds that it could be even *doubled*, which remark is confirmed by an inscription, *B. n.* 2131 *Ζαζχοῦς*. Now had this barbarous word been nothing less than $\Sigma\delta\alpha\sigma\delta\sigma\delta\omicron\upsilon\varsigma$, it must have been all but unpronounceable.

(c) From the Greek grammarians we learn that the Æolic (not Doric) $\sigma\delta\upsilon\gamma\acute{o}\varsigma$, for $\xi\upsilon\gamma\acute{o}\varsigma$, is analogous to $\sigma\kappa\acute{\iota}\phi\omicron\varsigma$ for $\xi\acute{\iota}\phi\omicron\varsigma$, and $\sigma\pi\acute{\epsilon}\lambda\lambda\iota\omicron\nu$ for $\psi\acute{\epsilon}\lambda\lambda\iota\omicron\nu$; which means that *Z* is equivalent to $\Sigma\Delta$ in the same sense that Ξ and Ψ are equivalent to ΣK and $\Sigma\Pi$ respectively.

(d) The Athenians used the character *Z* long before the introduction of Ξ and Ψ . And there is no evidence that they ever wrote $\Sigma\Delta$ for *Z* (§ 12). On the contrary, the forms $\tau\acute{o}\upsilon\sigma\delta\epsilon$, $\tau\acute{\alpha}\sigma\delta\epsilon$, $\tau\omicron\sigma\acute{o}\sigma\delta\epsilon$, $\tau\omicron\acute{\iota}\omicron\upsilon\sigma\delta\epsilon$, $\tau\eta\lambda\iota\kappa\acute{o}\sigma\delta\epsilon$, and the Epic $\ast\acute{\alpha}\acute{\iota}\delta\acute{o}\varsigma\delta\epsilon$, $\ast\acute{\alpha}\rho\gamma\omicron\varsigma\delta\epsilon$, $\ast\epsilon\rho\epsilon\beta\acute{o}\varsigma\delta\epsilon$, $\theta\acute{\eta}\beta\alpha\varsigma\delta\epsilon$, $\phi\acute{o}\omega\varsigma\delta\epsilon$ show that they did not regard $\Sigma\Delta$ as strictly equivalent to *Z*.

As to -ζε in the adverbs Ἀθήναζε, Θήβαζε, Ὀλυμπίαζε, Θρίωζε, θύραζε, ἔραζε, and χαμάζε, it must be regarded as another form of -δε or -σε; for Θρίωζε cannot come from ἡ Θρία; the primitives of ἔραζε and χαμάζε are not in use; and Ὀλυμπία has no plural. Besides, when -δε is annexed to the accusative, that case still retains its peculiar force; thus, Θήβαςδε, *to Thebes*, Θήβαζε, *Thebes-ward*; οἰκόνδε, *to the house*, οἶκαδε, *homeward*; Κόωνδ' εὐναιομένην, *to the well-inhabited Cos*.

(e) Quintilian and other Latin authors say that its sound could not be expressed in Latin letters. According to Maximus Victorinus, the Romans would have employed OE for T, and SD for Z, if they had not adopted these two Greek characters; which means that T is to OE what Z is to SD; that is, Z was not exactly the same as SD.

The unqualified assertion, therefore, that Z stands for ΣΔ, admits of being modified as follows: Z is a *commixture* of Σ and Δ; it is *doubled in pronunciation*, which makes the preceding syllable long by position; and, in the middle of a word, it admits of being interchanged with its kindred sounds ΣΔ, ΔΔ, or ΣΣ.

As to the Italian and German sounds ΔΣ and ΤΣ, they cannot be said to belong to Z, because the Greek laws of euphony forbid these combinations. Thus, from αἶδω, λίτομαι, we have αἰσομαι, λίσασθαι, never αἰζομαι, λίζασθαι.

3. *The Semivowels Ξ, Ψ.*

Ξ and Ψ, in the early Attic dialect, were sounded and written ΧΣ and ΦΣ respectively. In the other dialects, they were equivalent to ΚΣ and ΠΣ respectively (§ 12).

In later times, the sounds ΚΣ and ΠΣ prevailed. Hence the statement of Dionysius, that Ξ stands for ΚΣ, and Ψ for ΠΣ.

According to Priscian, these letters were softer than CS or GS, and PS or BS. Terentianus Maurus says the same of Ξ.

4. *Pronunciation of the Mutes Π Β Φ, Τ Δ Θ, Κ Γ Χ.*

Π like *p* in *past, pain, put*.

Β like *b* as in *bar, bet, bit, boon*.

Φ like *f* pronounced with the lips compressed as in blowing moderately. The Latin F, according to Terentianus Maurus, requires the lower lip to be pressed with the upper teeth. (§ 17, 4.)

Τ like *t* in *task, till, extant*.

Δ like *d* as in *dart, deem, doom, under*.

Θ like *th* in *thin, thick, both, mouth*.

Κ like *k* in *kind, keep*.

Γ like *g* in *garden, go, get, give*. Before a palatal Κ Γ Χ Ξ, like *ng* in *hang*: The Greeks often wrote Ν instead of Γ before a palatal. *B. nn.* 4 Μίνκων. 93 ἐνγράφαι. 107 ἐπανγέλεται. 401 ἐνευκαμένον. 1001 ἀνάνκης. 2556, 55 λανχανόντων. Ni-

gidius regards the nasal sound of N before a palatal as the connecting link between the common N and G. (§§ 16, 4 ; 17, 3.)

X like the German *ch*, or Spanish *j*.

(a) Π B Φ require the action of the *lips*. This reduces them at once to the group *p, b, v, w, f, m*.

Π is the *smoothest* or *slightest*, and Φ the *roughest*, of these three mutes: *B* is rougher than Π , but smoother than Φ . This makes Π and Φ equivalent to *p* and *f* respectively. *B* then must be *b, v, w, or m*. But *B* is a *mute*, that is, it makes no audible sound without the help of a vowel or semivowel. This makes it the same as *b* ; for *v, w, and m*, being semivowels, are out of the question.

After the commencement of the Christian era, the sound of the Latin Digamma was represented by *OT, T, or B*. But this by no means proves that *B* was sounded like the Latin *V* ; but only that *B* was a kindred sound. Otherwise we shall be forced to admit that there was no difference between *OT, T, and B* ; which is untenable. It is observed further, that although the Greeks indifferently wrote *B* or *OT* for *V*, the Romans always represented the Greek *B* by their *B*, never by their Digamma *V*. And Priscian, who has written so much about the *Vau*, nowhere intimates that it had any other sound than that of the Greek *F*, which, as we have already seen, was equivalent to the English *W*. (§§ 9 ; 17, 1.)

(b) $T \Delta \Theta$ require the action of the *tongue* and *teeth*. This refers them to *t*, *d*, *th* (*this*), *th* (*thin*).

T is the *smoothest* or *slightest*, and Θ the *roughest*, of these three mutes: Δ is rougher than T , but smoother than Θ . This makes T and Θ equivalent to *t* and *th* (*thin*) respectively. Δ then must be *d* or *th* (*this*). But Δ is a *mute*; that is, it makes no audible sound without the help of a vowel or semivowel. This identifies it with *d*; for the semivowel *th* (*this*) does not answer to the definition of a mute.

(c) $K \Gamma X$ are formed with the *base of the tongue* and *palate*. This reduces them to *k*, *g* hard, *gh*, *ch* German, and *y* consonantal.

K is *smoothest* or *slightest*, and X the *roughest*, of these three mutes: Γ is rougher than K , but smoother than X . This makes K and X equivalent to *k* and German *ch* respectively. Γ then must be *g* hard, *gh*, or *y* consonantal. But Γ is a *mute*; it makes no sound without the help of a vowel or semivowel. This makes it the same as *g* hard; for the definition of a mute cannot possibly apply to the semivowels *gh* and *y*.

In the time of Sextus, the aspirates $\Phi \Theta X$ were by some grammarians classed with the semivowels. Now if $B \Gamma \Delta$ had been sounded like the modern Greek $\beta \gamma \delta$, they also would have been added to that list, for they, as the aspirates of the sounds *b*, *g*, *d*, have greater claims to that

appellation than $\Phi \Theta X$, the aspirates of k , p , t . It is true that b , g hard, and d are not absolutely mute, for by overstraining the vocal organs we can give them certain obscure and indefinable sounds; but the same can be said also of p , k , t . The fact is, these consonants were called voiceless and soundless as compared with the vowels and semivowels, not with reference to voice and sound in the abstract (§ 19).

Analogy would lead us to suppose that, when $B \Gamma \Delta$ came in contact with the rough breathing, they were changed into their corresponding aspirate sounds bh , gh , dh (th in *this*). But of this we have no proof.

5. Doubling of Consonants.

When a consonant was doubled in pronunciation, it was doubled also in writing. Thus the ear could readily distinguish $\lambda\eta\mu\mu\alpha$ from $\lambda\eta\mu\alpha$, $\gamma\rho\upsilon\lambda\lambda\acute{\iota}\zeta\epsilon\iota\nu$ from $\gamma\rho\upsilon\lambda\acute{\iota}\zeta\epsilon\iota\nu$. (*Lucian. Pseud. p. 563. Phrynichus, in Γρυλλίζειν.*)

PLATO, *Cratyl. pp. 426. 427.* Τὸ δ' οὖν Ρῶ τὸ στοιχείον, ὥσπερ λέγω, καλὸν ἔδοξεν ὄργανον εἶναι τῆς κινήσεως τῷ τὰ ὀνόματα τιθεμένῳ πρὸς τὸ ἀφομοιοῦν τῇ φορᾷ. . . . Ἐώρα γάρ, οἶμαι, τὴν γλῶτταν ἐν τούτῳ ἤκιστα μένουσαν, μάλιστα δὲ σειομένην. . . . Διὰ τοῦ Φ καὶ τοῦ Ψ καὶ τοῦ Ξίγμα καὶ τοῦ Ζήτα, ὅτι πνευματώδη τὰ γράμματα, πάντα τὰ τοιαῦτα μεμίμηται αὐτοῖς ὀνομάζων, οἷον τὸ ψυχρὸν καὶ τὸ ζέον καὶ τὸ σείεσθαι, καὶ ὅλως σεισμόν. Καὶ ὅταν πού τὸ φυσῶδες μιμῆται, πανταχοῦ ἐνταῦθα ὡς τὸ πολὺ τὰ τοιαῦτα γράμματα ἐπιφέρειν φαίνεται ὁ τὰ ὀνόματα τιθέμενος. Τῆς δ' αὖ τοῦ Δ συμπίσεως καὶ τοῦ Τ καὶ

ἀπερείσεως τῆς γλώττης τὴν δύναμιν χρήσιμον φαίνεται ἡγήσασθαι πρὸς τὴν μίμησιν τοῦ δεσμοῦ καὶ τῆς στάσεως. Ὅτι δὲ ὀλισθάνει μάλιστα ἐν τῷ Λ ἢ γλώττα κατιδὼν, ἀφομοιῶν ὠνόμασε τὰ τε λεία καὶ αὐτὸ τὸ ὀλισθάνειν καὶ τὸ λιπαρὸν καὶ τὸ κολλῶδες καὶ τὰλλα πάντα τὰ τοιαῦτα. Ἡ δὲ ὀλισθανούσης τῆς γλώττης ἀντιλαμβάνεται ἢ τοῦ Γ δύναμις, τὸ γλίσχρον ἀπεμιμήσατο καὶ γλυκὺ καὶ γλοιῶδες. Τοῦ δ' αὖ Ν τὸ εἶσω αἰσθόμενος τῆς φωνῆς, τὰ ἔνδον καὶ τὰ ἐντὸς ὠνόμασεν, ὡς ἀφομοιῶν τοῖς γράμμασι τὰ ἔργα.

DIONYS. HAL. *de Comp.* 14. Ὅκτὼ γὰρ τὸν ἀριθμὸν ὄντων αὐτῶν, πέντε μὲν ἐστὶν ἀπλᾶ, τό τε Λ καὶ τὸ Μ καὶ τὸ Ν καὶ τὸ Ρ καὶ τὸ Σ· τρία δὲ διπλᾶ, τό τε Ζ καὶ τὸ Ξ καὶ τὸ Ψ. Διπλᾶ δὲ λέγουσιν αὐτὰ ἦτοι διὰ τὸ σύνθετα εἶναι, τὸ μὲν Ζ διὰ τοῦ Σ καὶ Δ, τὸ δὲ Ξ διὰ τοῦ Κ καὶ Σ, τὸ δὲ Ψ διὰ τοῦ Π καὶ Σ, συνεφθαρμένων ἀλλήλοις καὶ ἰδίαν φωνὴν λαμβανόντων· ἢ διὰ τὸ χώραν ἐπέχειν δυοῖν γραμμάτων ἐν ταῖς συλλαβαῖς παραλαμβανόμενα. Ἐκάστου δὴ τούτων κρείττω μὲν ἐστὶ τὰ διπλᾶ τῶν ἀπλῶν, ἐπειδὴ μείζονα τῶν ἐτέρων, καὶ μᾶλλον ἐγγίξιν δοκεῖ τοῖς τελείοις· ἦττω δὲ τὰ ἀπλᾶ, διὰ τὸ εἰς βραχυτέρους αὐτῶν τόνους συνάγεσθαι τὸν ἦχον. Ἐκφωνεῖται δὲ αὐτῶν ἕκαστον τοιούτῳ δὴ τινι τρόπῳ· τὸ μὲν Λ, τῆς γλώσσης πρὸς τὸν οὐρανὸν ἀνισταμένης, καὶ τῆς ἀρτηρίας συνεχούσης τὸ πνεῦμα. Τὸ δὲ Μ, τοῦ μὲν στόματος τοῖς χεῖλεσι πιεσθέντος διὰ τῶν ρωθῶνων μεριζομένου· τὸ δὲ Ν, τῆς γλώττης τὴν φορὰν τοῦ πνεύματος ἀποκλειούσης, καὶ μεταφερούσης ἐπὶ τοὺς ρῶθνας τὸν ἦχον· τὸ δὲ Ρ, τῆς γλώσσης ἄκρας ἀπορραπίζούσης τὸ πνεῦμα, καὶ πρὸς τὸν οὐρανὸν ἐγγὺς τῶν ὀδόντων ἀνισταμένης· το δὲ Σ, τῆς μὲν γλώσσης προσαναγομένης ἄνω πρὸς τὸν οὐρανὸν, τοῦ δὲ πνεύματος διὰ μέσου αὐτοῦ φερομένου, καὶ περὶ τοὺς ὀδόντας λεπτὸν καὶ στενὸν ἐξωθοῦντος τὸ σύριγμα. Τρία δὲ τὰ λοιπὰ ἡμίφωνα μικτὸν λαμβάνει τὸν ψόφον, ἐξ ἑνὸς μὲν τῶν ἡμιφώνων τοῦ Σ, τριῶν δὲ ἀφῶνων τοῦ τε Κ καὶ τοῦ Δ καὶ τοῦ Π.

Οὔτοι σχηματισμοὶ γραμμάτων ἡμιφώνων. Δύναται δὲ οὐχ ὁμοίως κινεῖν τὴν ἀκοὴν ἅπαντα· ἡδύνη μὲν γὰρ αὐτὴν τὸ Λ, καὶ ἔστι τῶν ἡμιφώνων γλυκύτατον· τραχύνη δὲ τὸ Ρ, καὶ ἔστι τῶν ὁμογενῶν γενναϊότατον· μέσως δὲ πῶς διατίθῃσι τὰ διὰ τῶν ρωθῶνων συνηχούμενα, τό τε Μ καὶ τὸ Ν, κερατοειδεῖς ἀποτελοῦντα τοὺς ἤχους. Ἀχαρί δὲ καὶ ἀηδὲς τὸ Σ, καὶ εἰ πλεονάσειε σφόδρα λυπεῖ· θηριώδους γὰρ καὶ ἀλόγου

μᾶλλον ἢ λογικῆς ἐφάπτεσθαι δοκεῖ φωνῆς ὁ συριγμός. Τριῶν δὲ τῶν ἄλλων γραμμάτων, ἃ δὴ διπλᾶ καλεῖται, τὸ Ζ μᾶλλον ἡδύνει τὴν ἀκοὴν τῶν ἐτέρων· τὸ μὲν γὰρ Ζ διὰ τοῦ Κ, τὸ δὲ Ψ διὰ τοῦ Π τὸν συριγμὸν ἀποδίδωσι, ψιλῶν ὄντων ἀμφοτέρων· τοῦτο δ' ἡσύχη τῷ πνεύματι δασύνεται, καὶ ἔστι τῶν ὁμογενῶν γενναιότατον.

Id. ibid. Τῶν δὲ καλουμένων ἀφώνων ἐννέα ὄντων τρία μὲν ἐστὶ ψιλὰ, τρία δὲ δασέα, τρία δὲ μεταξὺ τούτων. Ψιλὰ μὲν τό τε Κ καὶ τὸ Π καὶ τὸ Τ· δασέα δὲ τό τε Χ καὶ τὸ Φ καὶ τὸ Θ· κοινὰ δὲ ἀμφοῖν, τό τε Γ καὶ τὸ Β καὶ τὸ Δ. Ἐκφωνεῖται δὲ αὐτῶν ἕκαστον τρόπον τόνδε· τρία μὲν ἀπὸ τῶν χειλέων ἄκρων, τὸ Π καὶ τὸ Φ καὶ τὸ Β, ὅταν τοῦ στόματος πιεσθέντος τὸ προβαλλόμενον ἐκ τῆς ἀρτηρίας πνεῦμα λύσῃ τὸν δεσμὸν αὐτοῦ. Καὶ ψιλὸν μὲν ἐστὶν αὐτῶν τὸ Π, δασὺ δὲ τὸ Φ, μέσον δὲ ἀμφοῖν τὸ Β· τοῦ μὲν γὰρ ψιλώτερόν ἐστι, τοῦ δὲ δασύτερον. Μία μὲν αὕτη συζυγία τριῶν γραμμάτων ἀφώνων ὁμοίῳ σχήματι λεγομένων ψιλότητι δὲ καὶ δασύτητι διαφερόντων. Τρία δὲ ἄλλα λέγεται τῆς γλώσσης ἄκρῳ τῷ στόματι προσερείδομένης κατὰ τοὺς μετεωροτέρους ὀδόντας, ἔπειθ' ὑπὸ τοῦ πνεύματος ὑπορραπιζομένης καὶ τὴν διέξοδον αὐτῷ περὶ τοὺς ὀδόντας ἀποδιδούσης, τὸ Τ καὶ τὸ Θ καὶ τὸ Δ. Διαλλάττει δὲ καὶ ταῦτα δασύτητι καὶ ψιλότητι, ψιλὸν μὲν γάρ ἐστιν αὐτῶν τὸ Τ, δασὺ δὲ τὸ Θ, μέσον δὲ καὶ ἐπικοινωνοῦν τὸ Δ. Αὕτη δευτέρα συζυγία γραμμάτων ἀφώνων. Τρία δὲ τὰ λοιπὰ τῶν ἀφώνων λέγεται μὲν τῆς γλώσσης ἀνισταμένης κατὰ τὸν οὐρανὸν ἐγγὺς τῆς φάρυγγος καὶ τῆς ἀρτηρίας ὑπηχούσης τῷ πνεύματι, τὸ Κ καὶ τὸ Χ καὶ τὸ Γ, οὐδενὶ ταῦτα διαφέροντα τῷ σχήματι ἀλλήλων, πλὴν ὅτι τὸ μὲν Κ ψιλῶς λέγεται, τὸ δὲ Χ δασέως, τὸ δὲ Γ μετρίως καὶ μεταξὺ τούτων. Κράτιστα μὲν οὖν ἐστὶν ὅσα τῷ πνεύματι πολλῶι λέγεται· δεύτερα δὲ, ὅσα μέσῳι· κακίῳ δὲ ὅσα ψιλῷ. Ταῦτα μὲν γὰρ τὴν ἑαυτῶν δύναμιν ἔχει μόνην· τὰ δὲ δασέα, καὶ τὴν τοῦ πνεύματος προσθήκην, ὥστε ἐγγὺς τοῦ τελειότατα εἶναι ἐκεῖνα.

VARRO *apud A. Cornutum*, p. 2286, *Putsch*. Varroni placet R litteram, si primo loco ponatur, non adspirari; lector enim ipse, inquit, intelligere debet Rodum, tametsi H non habet, Rhodum esse, retorem, rhetorem.

VELIUS LONGUS, p. 2217. Denique si quis secundum naturam vult excutere hanc litteram, id est Z, inveniet duplicem

non esse, si modo illam aure sinceriore exploraverit. Nam et simpliciter scripta aliter sonare potest, aliter geminata ; quod omnino duplici literae non accidit, ne geminetur.

This author must have flourished before the middle of the second century, for he is mentioned by Aulus Gellius (18, 9).

QUINTIL. 12, 10, 27. Jucundissimas ex Graecis litteras non habemus, vocalem alteram, alteram consonantem, quibus nullae apud eos dulcius spirant ; quas mutuari solemus quoties illorum nominibus utimur. Quod cum contigit nescio quomodo hilarior protinus renidet oratio, ut in *Ephyris* et *Zephyris*. Quae si nostris literis scribantur, surdum quiddam et barbarum efficient, et velut in locum earum succedent tristes et horridae, quibus Graecia caret.

ASPER JUNIOR, 2. Quibus [literis] Graecorum accedunt duae Z et Y. Nam *Mezentium* et *Hylam* et alia nobis peregrina nomina scribere et enunciare proprio sono non possumus.

TERENTIANUS MAURUS, 227 – 229 (F).

Imum superis dentibus apprimens labellum,
Spiramine leni, velut hirta Graja vites,
Hanc ore sonabis.

Id. 959.

Consonam non ζι jugabit, quia sono levi studet.

SEXTUS, *advers. Gram.* 5. Τῶν δὲ συμφώνων τὰ μὲν ἡμίφωνα ἔστι κατ' αὐτοὺς τὰ δὲ ἄφωνα. Καὶ ἡμίφωνα μὲν, ὅσα δι' αὐτῶν ροίζον ἢ σιγμὸν ἢ μυγμὸν ἢ τινα παραπλήσιον ἤχον κατὰ τὴν ἐκφώνησιν ἀποτελεῖν πεφυκότα, καθάπερ τὸ Ζ Θ Λ Μ Ν Ξ Ρ Σ Φ Χ Ψ, ἢ, ὥς τινες, χωρὶς τοῦ Θ καὶ Φ καὶ Χ, τὰ λειπόμενα ὀκτώ. Ἄφωνα δὲ ἔστι τὰ μήτε συλλαβὰς καθ' ἑαυτὰ ποιεῖν δυνάμενα μήτε ἤχων ιδιότητας, αὐτὸ δὲ μόνον μετὰ τῶν ἄλλων συνεκφωνούμενα, καθάπερ Β Γ Δ Κ Π Τ, ἢ ὥς ἔνιοι, καὶ τὸ Θ Φ Χ. Καὶ μὴν κοινῶς τῶν συμφώνων πάλιν τὰ μὲν φύσει δασέα λέγουσι, τὰ δὲ ψιλὰ· καὶ δασέα μὲν Θ Φ Χ, ψιλὰ δὲ Κ Π Τ. Μόνον δὲ φασι τὸ Ρ ἐπιδέχεσθαι ἐκάτερον, δασύτητα καὶ ψιλότητα. Λέγουσι δὲ τινα τῶν συμφώνων καὶ διπλᾶ, καθάπερ τὸ Ζ Ξ Ψ· συνεστηκέναι γάρ φασι τὸ μὲν Ζ ἐκ τοῦ Σ καὶ Δ, τὸ δὲ Ξ ἐκ τοῦ Κ καὶ Σ, τὸ δὲ Ψ ἐκ τοῦ Π καὶ Σ.

MAXIMUS VICTORINUS, 18. Literae peregrinae sunt Z et Y, quae peregrinae a nobis propter Graeca quaedam nomina assumptae sunt, ut *Hylas*, *Zephyrus*; quae si non essent, *Hoelus* et *SDephirus* [v. l. *Depherus*] diceremus; quarum Y inter vocales habetur, inter mutas Z duplex, quae loco duarum consonantium apud nos fungitur, nec aliter metri ratio constare potest in illo versu:

ubi est Mezentius.

Siquidem *Me* brevis est syllaba, verum excipitur a duplici Z, quae si assumpta non esset, per S et D *Mesdentium* scriberemus.

PRISCIAN. 1, 13. Sciendum tamen quod hic quoque error a quibusdam antiquis Graecorum grammaticis invasit Latinos, qui Φ et Θ et X semivocales putabant, nulla alia causa, nisi quod spiritus in eis abundet, inducti.

Id. 1, 24. 25. Aspiratio ante vocales omnes poni potest, post consonantes autem quatuor tantummodo more antiquo Graecorum, C, T, P, R, ut *habeo*, *Herennius*, *heros*, *hiems*, *homo*, *humus*, *Hylas*, *Chremes*, *Thraso*, *Philippus*, *Pyrrhus*. Ideo autem extrinsecus ascribitur vocalibus, ut minimum sonet, consonantibus autem intrinsecus, ut plurimum. Omnis enim litera sive vox plus sonat ipsa sese, cum postponitur, quam cum anteponitur, quod vocalibus accidens esse videtur; nec si tollatur ea, perit etiam vis significationis, ut si dicam *Erennius*, absque aspiratione, quamvis vitium videar facere, intellectus tamen permanet. Consonantibus autem sic cohaeret, ut ejusdem penitus substantiae sit, ut, si auferatur, significationis vim minuat prorsus, ut si dicam *Cremes* pro *Chremes*. RH autem ideo non est translatum ab illis [Graecorum doctissimis] in aliam figuram, quod nec sic cohaeret huic quomodo mutis, nec si tollatur, minuit significationem. Quamvis enim subtracta aspiratione dicam *retor*, *Pyrrus*, intellectus integer manet, non aliter quam si antecedens vocalibus auferatur. Unde ostenditur ex hoc quoque aliqua esse cognatio R literae cum

vocalibus. Ex quo quidam dubitaverunt, utrum praeponi debeat huic aspiratio, an subjungi.

Id. 1, 42. Multo molliorem et volubiliorem sonum habet Ψ quam PS vel BS. Sic X etiam quam GS vel CS.

CA. vol. 4, p. 177. Διὰ τί ἔχει ἔρραπτον δύο PP; Ἐπειδὴ τὰ σύμφωνα τοῦ ἐνεστῶτος φυλάττεσθαι θέλει καὶ ἐν τοῖς παρωχημένοις, οἷον φιῶ ἐφίλουν, τύπτω ἔτυπτον· φυλάττει γὰρ τὸ Φ καὶ τὸ Τ. Ἀπὸ οὖν τοῦ ράπτω καὶ ραπίζω ἂν γένηται ὁ παρατατικὸς προσόδωι τοῦ Ε δι' ἐνὸς τοῦ ΡΑ, ἀναγκάζε[τ]αι ψιλοῦσθαι τὸ Ρ, τοῦ ἐνεστῶτος δασυνομένου. Τούτου χάριν προσλαμβάνει ὁ παρατατικὸς καὶ ἕτερον Ρ, ἵνα φυλαχθῇ τὸ πνεῦμα τοῦ ἐνεστῶτος καὶ δασυνθῇ. Ἐὰν εὐρεθῶσι δύο ΡΡ, τὸ μὲν πρῶτον ψιλοῦται, τὸ δὲ ἕτερον δασύνεται.

BA. p. 693. Ἐπὶ συμφώνου τίθεται ἐνὸς μόνου τοῦ Ρ ἢ δασεία καὶ ἡ ψιλὴ. Ἐπὶ μὲν τοῦ ῥώμη καὶ ῥέω τίθεται ἡ δασεία· ἐπὶ δὲ τοῦ ῥάρος, ὃ σημαίνει τὸ βρέφος κατὰ τοὺς Αἰολεῖς, ἡ ψιλὴ, ὅτι ἡ Αἰολικὴ γλῶττα τὸ ψιλοῦν φιλεῖ. Τοῦτο δὲ τὸ Ρ οὐ μόνον κατ' ἀρχὰς καὶ ψιλοῦται καὶ δασύνεται, ἀλλὰ κατὰ τὸ μέσον, οἷον τὸ ἔρραπτον· τὸ μὲν γὰρ πρῶτον ψιλοῦται, τὸ δὲ δεύτερον δασύνεται. Οἱ δὲ ἀρχαῖοι γραμματικοὶ τὸ μὲν μετὰ ψιλοῦ εὐρισκόμενον Ρ ἐψίλουν, τὸ δὲ μετὰ δασέος ἐδάσυνον· οἷον τὸ Ἄτρεῦς καὶ κάπρος ἐψίλουν, τὸ δὲ χρόνος, ἀφρόος, θρόνος, ἐδάσυνον.

Ibid. p. 815. Καὶ ἔτι λέγουσιν ὅτι οὐκ εἰσὶν ἐκ δύο συμφώνων τὰ διπλᾶ, ἐπειδὴ ὁ Ὅμηρος τὸ Ζ οὐ κατ' ἐπέκτασιν λαμβάνει, οἷον

Οἷ τε Ζάκυνθον ἔνναιον,
καὶ

ἄστυ Ζελεῖης.

Ἄλλως τε εἰ καὶ συγχωροῦμεν αὐτὰ δύναμιν ἔχειν δύο συμφώνων, ἐπειδὴ οἱ Αἰολεῖς κατὰ τὴν προφορὰν τοῦ ζυγός σδυγός γράφουσι καὶ κατὰ τὴν προφορὰν τοῦ ξίφος κσίφος [read σκίφος], καὶ κατὰ τὴν προφορὰν τοῦ ψέλλιον σπέλλιον, ἀλλ' ὅμως οὐδεὶς τὰ κατὰ διάλεκτον ἰδιάζοντα εἰς κοινὸν παραλαμβάνειν.

In Cramer's *Anecdota* (vol. 4, p. 326), the latter part of this passage is more correctly given: ἐπειδὴ ἐπλανήθησαν οἱ Αἰολεῖς κατὰ τὴν προφορὰν τὸ ζυγός σδυγός γράφοντες, καὶ τὸ ξίφος σκίφος, καὶ τὸ ψέλλιον σπέλλιον.

ACCENT.

THE GREEK ACCENT.

§ 25.

1. PLATO observes that new words can be formed from old ones by the addition or omission of letters, and by changing the *sharpnesses*. Thus, Δίφιλος comes from Διὶ φίλος by dropping one of the I's, and pronouncing the middle syllable *heavy* instead of *sharp*. He derives ἄνθρωπος from ἀναθρῶν ἀ ὄπωπεν by dropping A and pronouncing the last syllable *heavy*.

The letters, says Aristotle, differ from each other in the position of the vocal organs, in roughness and smoothness, in length and shortness, and also in *sharpness*, *heaviness*, and the *intermediate* state.

From the same author we learn that οὐ, *no*, *not*, could be distinguished in pronunciation from the adverb οὐ, *where*, by its being *sharper*. He tells us also that the *accent* of the Epic infinitive διδόμεν was not the same as that of the first person plural δίδομεν.

Dionysius is more explicit on the subject than either of his predecessors. Every word, according to him, has the *sharp*, *heavy*, or *compound stress*.

In Plutarch's time, the genitive 'Ερμου, from 'Ερμῆς, was pronounced with the *circumflex* on the last syllable, whereby it was distinguished from "Ερμου, the genitive of "Ερμος.

All our rules for accenting Greek words are recognized by the ancient grammarians.

Strictly speaking, the Greek has but one accent, namely, the *acute*.

Every unaccented syllable is said to have the *grave*. For instance, ἄνθρωπος is ἄνθρωπός. The grave accent merely denotes the absence of the acute.

The *circumflex* is compounded of the acute and the grave; that is, the first element of every circumflexed syllable has the acute, and the second the grave: for instance, μοῦσα, μῶσα, are the same as μούσα, μῶσά.

The difference between the acute and circumflex was by no means trifling; thus, as we have already seen, οὔ, *where*, could be readily distinguished in pronunciation from οὔ, *no, not*, by the accent alone.

When the acute is placed on a long syllable, the stress is laid upon the second element of that syllable; thus, μούσης, μώσας, are the same as μούσης, μῶσας.

At the end of a word before another word in the same sentence, the acute is less strong than it would be if the word stood by itself or at the end

of a period. To express this weak acute, the grammarians employed the mark for the *grave*; for example, in the expression ἀνὴρ ἀγαθός, the accent of -νῆρ is not so strong as in ἀγαθὸς ἀνὴρ.

The Greek accents could not have differed specifically from the corresponding English accents. Thus,

ἄγομεν, τέλεσι	are accented like	ánimál, défínite,
φάτις, τίσις	“ “	fámish, finísh,
λίπεσθε, ἤκουσας`	“ “	líberty, álms-basket,.
τάσσω, ὄρκων	“ “	cómpound,
πρᾶγμα, πῖνε	“ “	fátal, méeting,
ἡδον, καλῶς	“ “	hâting, compóse,
παῖς, τῶν, οὖν	“ “	spíce, fíght, stóne.

The accent does not in the least affect the quantity of the vowel upon which it is placed. On the contrary, quantity is the rēgulator of all its movements. Compare the preceding examples.

It is to be observed that in English even the circumflex admits of being put on the antepenult; as *library*, *spíciness*.

2. The invention of most of the prosōdiacal marks has been attributed to Aristophanes, the grammarian, who flourished about two hundred years before Christ.

The mark for the acute is ('), for the grave (`). The most ancient form of the circumflex is (^), that is, the acute and grave united into one form; which, being slightly modified, produced the later

forms (˘) and (ˉ), all of which are found in manuscripts.

PLATO, *Cratyl.* p. 399 A, B. Πρῶτον μὲν γὰρ τὸ τοιόνδε δεῖ ἐννοῆσαι περὶ ὀνομάτων, ὅτι πολλάκις ἐπεμβάλλομεν γράμματα, τὰ δ' ἐξαιρούμεν, παρ' ὃ βουλόμεθα ὀνομάζοντες, καὶ τὰς ὀξύτητας μεταβάλλομεν; Οἷον Διὶ φίλος· τοῦτο ἵνα ἀντὶ ρήματος ὄνομα ἡμῖν γένηται, τό τε ἕτερον αὐτόθεν ἴωτα ἐξείλομεν καὶ ἀντὶ ὀξείας τῆς μέσης συλλαβῆς βαρεῖαν ἐφθεγξάμεθα. Ἄλλων δὲ τοῦναντίον ἐμβάλλομεν γράμματα, τὰ δὲ βαρύτερα [ὀξύτερα] φθεγγόμεθα. ΕΡΜ. Ἀληθῆ λέγεις. ΣΩ. Τούτων τοίνυν ἐν καὶ τὸ τῶν ἀνθρώπων ὄνομα πέπονθεν, ὥς ἐμοὶ δοκεῖ. Ἐκ γὰρ ρήματος ὄνομα γέγονεν, ἐνὸς γράμματος τοῦ Α ἐξαιρεθέντος, καὶ βαρυτέρας τῆς τελευτῆς γενομένης. ΕΡΜ. Πῶς λέγεις; ΣΩ. Ὡδε. Σημαίνει τοῦτο τὸ ὄνομα, ὃ ἀνθρώπος, ὅτι τὰ μὲν ἄλλα θηρία ὧν ὀρεῖ οὐδὲν ἐπισκοπεῖ οὐδὲ ἀναλογίζεται οὐδὲ ἀναθρεῖ, ὃ δὲ ἄνθρωπος ἅμα ἐώρακε (τοῦτο δ' ἐστὶ τὸ ὄπωπε) καὶ ἀναθρεῖ καὶ λογίζεται τοῦτο, ὃ ὄωπεν. Ἐντεῦθεν δὴ μόνον τῶν θηρίων ὀρθῶς ὁ ἄνθρωπος ἀνθρώπος ὠνομάσθη, ἀναθρῶν ἀ ὄωπεν.

ARISTOTEL. *Rhetor.* 3, 1, 4. Ἔστι δὲ αὕτη μὲν [ἡ ὑπόκρισις] ἐν τῇ φωνῇ, πῶς αὐτῇ δεῖ χρῆσθαι πρὸς ἕκαστον πάθος, οἷον πότε μεγάλης καὶ πότε μικρᾷ καὶ πότε μέσῃ, καὶ πῶς τοῖς τόνοις, οἷον ὀξεῖαι καὶ βαρεῖαι καὶ μέσῃ, καὶ ρυθμοῖς τίσι πρὸς ἕκαστον.

Id. Poet. 20. See above, § 19.

Id. ibid. 25, 18. Κατὰ δὲ προσωιδίαν [δεῖ διαλύειν] ὥσπερ Ἰππίας ἔλυνεν ὁ Θάσιος τὸ

δίδομεν δέ οἱ,

καὶ

τὸ μὲν οὐ καταπύθεται ὄμβρῳ.

Id. Elench. 4, 8. Παρὰ δὲ τὴν προσωιδίαν ἐν μὲν τοῖς ἀνεν γραφῆς διαλεκτικοῖς οὐ ράδιον ποιῆσαι λόγον, ἐν δὲ τοῖς γεγραμμένοις καὶ ποιήμασι μᾶλλον, οἷον καὶ τὸν Ὅμηρον ἔνιοι διορθοῦνται πρὸς τοὺς ἐλέγχοντας ὥς ἀτύπως εἰρηκότα

τὸ μὲν οὐ καταπύθεται ὄμβρῳ·

λύουσι γὰρ αὐτὸ τῇ προσωιδίᾳ λέγοντες τὸ οὐ ὀξύτερον. Καὶ τὸ περὶ τὸ ἐνύπνιον τοῦ Ἀγαμέμνονος, ὅτι οὐκ αὐτὸς ὁ Ζεὺς εἶπεν

δίδομεν δέ οἱ εὐχος ἀρέσθαι,

ἀλλὰ τὸ ἐνυπνίῳ ἐνετέλλετο διδόναι. Τὰ μὲν οὖν τοιαῦτα παρὰ προσωιδίαν ἐστί.

DIONYS. HAL. *de Comp.* 11. Οὐ μὴν ἅπασά γε ἡ λέξις ἢ καθ' ἐν μόριον λόγου ταττομένη τῆς αὐτῆς λέγεται τάσεως· ἀλλ' ἡ μὲν ἐπὶ τῆς ὀξείας ἢ δ' ἐπὶ τῆς βαρείας, ἡ δὲ ἐπ' ἀμφοῖν· τῶν δ' ἀμφοτέρας τὰς τάσεις ἔχουσῶν αἱ μὲν κατὰ μίαν συλλαβὴν συνεφθαρμένον ἔχουσι τῷ ὀξεῖ τὸ βαρὺ, ἃς δὲ περισπωμένας καλοῦμεν. Αἱ δὲ ἐν ἐτέρῳ τε καὶ ἐτέρῳ χωρὶς ἐκάτερον ἐφ' ἑαυτοῦ τὴν οἰκίαν φυλάττον φύσιν. Καὶ ταῖς μὲν δυσλλάβοις οὐδὲν τὸ διὰ μέσου χωρίον βαρύτητος καὶ ὀξύτητος· ταῖς δὲ πολυσυλλάβοις, οἳά ποτ' ἂν ὦσι, ἡ τὸν ὀξὺν τόνον ἔχουσα μία ἐν πολλαῖς βαρεῖαις ἔνεστιν.

PLUTARCH. *Thes.* 26. Καταλιπεῖν δὲ . . . καὶ σὺν αὐτοῖς Ἑρμον, ἄνδρα τῶν Ἀθήνησιν εὐπατρειδῶν· ἀφ' οὗ καὶ τόπον Ἑρμοῦ καλεῖν Οἰκίαν τοὺς Πυθοπολίτας, οὐκ ὀρθῶς τὴν δευτέραν συλλαβὴν περισπῶντας, καὶ τὴν δόξαν ἐπὶ θεὸν ἀπὸ ἥρωος μετατιθέντας.

SEXTUS, *advers. Gram.* 5. Ἄλλ' ἐπεὶ οὐδ' δύο μόνον ὑπειλήφασιν εἶναι προσωιδίας γραμματικῶν παῖδες, τὴν τε μακρὰν καὶ βραχείαν, ἀλλὰ καὶ ὀξείαν, βαρεῖαν, περισπωμένην, δασείαν, ψιλὴν, ἕκαστον τῶν ὑποδεδειγμένων φωναέντων ἔχον τινὰ τούτων κατ' ἰδίαν προσωιδίαν γενήσεται στοιχείον.

ARCADIUS, *de Accent.* p. 186. Οἱ χρόνοι καὶ ὁ τόνος καὶ τὰ πνεύματα, Ἀριστοφάνους ἐκτυπώσαντος, γέγονε πρὸς τε διαστολὴν τῆς ἀμφιβόλου λέξεως, καὶ πρὸς τὸ μέλλον τῆς φωνῆς συμπάσης καὶ τὴν ἀρμονίαν, ὥς ἐὰν ἐπάιδουμεν φθεγγόμενοι.

BA. p. 756. Τὸ σημεῖον τοῦ τόνου τούτου [τῆς περισπωμένης] ἄμα ἄνεισι καὶ κάτεισι, Οὗτος οὖν ὁ τόνος δοκεῖ σύνθετος εἶναι, ὥσπερ καὶ τὸ σημεῖον ἐλέγχει, συγκείμενον ἐξ ὀξείας καὶ βαρείας.

Ibid. p. 757. Ἡ περισπωμένη ταύτης ἔτυχε τῆς προσηγορίας· ἔοικε γὰρ τῷ σχήματι περικεκλασμένηι ράβδῳ, ἐχούσῃ δύο ἀρχὰς νευούσας εἰς ἀλλήλας.

Ibid. pp. 674 – 690. Rules for accenting Greek words.

THE LATIN ACCENT.

§ 26.

Quintilian informs us that the Latin has three accents, the *acute*, the *grave*, and the *circumflex*; that the acute cannot go farther back than the antepenult; that if the penult is long, it takes either the acute or the circumflex; that if the penult is short, it takes the grave, and the antepenult takes the acute; that the last syllable of a Latin word is not accented; that dissyllables take the accent on the penult; that monosyllables take either the acute or the circumflex.

Diomedes also recognizes these three accents, and gives the following rules: A dissyllable constituting a pyrrhic, a spondee, an iambus, or a trochee whose first syllable is long by position only, takes the acute on the penult; as, *púer*, *bónus*, *ámor*; *Cúmae*, *Thébae*, *héros*; *sóllers*; *Cáto*, *Céres*; *púlcher*, *ásper*. When a dissyllable constitutes a legitimate trochee, that is, a trochee whose first syllable is long by nature, it takes the circumflex on that syllable; as *mêta*, *brûma*, *praêtor*. A trisyllable constituting a dactyle, an anapæst, or a tribrach, takes the acute on the antepenult; as, *lúmina*, *moénia*, *sídera*, *Claúdius*, *Sérgius*; *Cícero*, *régio*; *mélius*. If it constitutes a palimbacchius, or an amphibrach, it takes the cir-

cumflex on the penult, if this penult is long by nature; as, *Românus*, *legâtus*; *Cethêgus*, *Sabînus*, *monîle*: but if this penult is long by position only, it takes the acute.

Quintilian, Diomedes, Donatus, Maximus Victorinus, and Priscian distinctly state that, in Greek, the accent can stand on one of the last three syllables of a word. Quintilian intimates that it was fashionable among the Romans to pronounce Greek names like *Atreus*, *Terei* (dative of *Tereus*), and *Nerei* (dative of *Nereus*), with the circumflex on the last syllable; thus, *Atreûs* (*Ἀτρεῦς*, Doric), *Terei* (*Τηρεῖ*), *Nerei* (*Νηρεῖ*). According to Donatus, Greek names are best pronounced with their Greek accent. Maximus Victorinus says that Greek names, retaining their Greek form, retain also their Greek accent; thus, *Thyás* (*Θυάς*), *Nats* (*Ναῖς*), *Themistô* (*Θεμιστώ*), *Calypso* (*Καλυψώ*), *Theanô* (*Θεανώ*): from which it may be inferred that, in words like *Calypso*, the Romans could not pronounce the last syllable with the acute accent.

It is remarked here, that the Greeks, when they wrote Roman names in Greek letters, accented them as if they were Greek words; as, *Traiianós*, *Ἀγροστος*, *Κικέρων*, after the analogy of such forms as *Σαρδιανός*, *εὐρωστος*, *Ἀχέρων*.

The Latin accent, then, is the same with the Greek accent in kind. With respect to its position, the following things are to be noticed.

That, in Greek, the quantity of the *last syllable* regulates the accent of the antepenult; in Latin, the quantity of the *penult*.

That, in common Greek, any of the last three syllables admits of being accented; in Latin, only the penult or antepenult.

QUINTIL. 1, 5, 22. 23. 24. Adhuc difficilior observatio est per *tenores* (quos quidam ab antiquis dictos *tonores* comperi, ut videlicet declinato a Graecis verbo, qui *τόνους* dicunt) vel *accentus*, quas Graeci *προσώδιας* vocant, cum acuta et gravis, alia pro alia ponitur, ut in hoc *Camillus*, si acuitur prima: aut gravis pro flexa, ut *Cethegus*, et hic prima acuta; nam sic media mutatur: aut flexa pro gravi, ut apice circumducta frequente, quam ex duabus syllabis in unam cogentes, et deinde flectentes, dupliciter peccant. Sed id saepius in Graecis nominibus accidit: ut *Atreus*, quem nobis juvenibus doctissimi senes acuta prima dicere solebant, ut necessario secunda gravis esset; item *Terei*, *Nerei*que.

Id. 1, 5, 30. In omni voce, acuta intra numerum trium syllabarum continetur, sive eae sunt in verbo solae, sive ultimae: et in his aut proxima extremae, aut ab ea tertia. Trium porro, de quibus loquor, media longa, aut *acuta*, aut *flexa* erit: eodem loco brevis utique *gravem* habebit sonum, ideoque positam ante se, id est ab ultima tertiam, acuet. Est autem in omni voce utique *acuta*, sed nunquam plus una; nec ultima unquam; ideoque in disyllabis prior. Praeterea nunquam in eadem flexa et acuta, quoniam eadem flexa et acuta; itaque neutra claudet vocem Latinam. Ea vero, quae sunt syllabae unius, erunt acuta, aut flexa, ne sit aliqua vox sine acuta.

A. GELLIUS, 13, 25. About the accent of the vocative in *-i* for *-ie*.

DIOMEDES, 2, p. 425. Accentus est acutae vel gravis vel inflexae orationis elatio, vocisve intentio vel inclinatio, acuto aut

inflexo sono regens verba. Sunt vero tres, *acutus*, *gravis*, et qui ex duobus factus est, *circumflexus*. Ex his acutus in correptis semper, interdum productis syllabis versatur: inflexus in his quae producuntur. Gravis autem per se nunquam consistere in ullo verbo potest, sed in his, in quibus inflexus est, aut acutus, caeteras syllabas obtinet. In Graecis itaque dictionibus cum acutus tria loca teneat, ultimum, penultimum, et antepenultimum, apud Latinos duo tantum loca lenet, penultimum et antepenultimum.

Id. 2, p. 427. In disyllabis partibus orationis prior syllaba semper acuitur aut inflectitur. Acuitur, si pyrrhichium compleverit, sicut *puer*, *bonus*, *amor*. Item spondeum indifferenter positum si habuerit, id est, sive natura, sive positione fuerit longa utraque syllaba, prior acuetur. Natura sic ut *Cumae*, *Thebae*, *heros*. Positione, ut *sollers*. Iambum quoque, ut *Cato*, *Ceres*. Trochaicum vero legitimum si compleverit, id est, si natura longam priorem syllabam habuerit, circumflectetur, ut *meta*, *bruma*, *praetor*. Sin autem positione longa fuerit prior syllaba memorati pedis, acuetur, ut *pulcher*, *asper*.

In trisyllabis dactylus indifferenter positus, et anapaestus, tribrachys quoque tertiam ab ultima acui desiderat. Dactylus natura qui est, sicut *lumina*, *moenia*, *sidera*, *Claudius*: positione, qui sit, ut *Sergius*. Similiter anapaestus, ut *Cicero*, *regio*. Item tribrachys, ut *melius*. Palimbacchius et amphibrachys in penultima circumflexum habebunt, ita tamen ut natura sit longa eadem penultima. Palimbacchius, ut *Romanus*, *legatus*. Item amphibrachys, ut *Cethegus*, *Sabinus*, *monile*. Horum si positione longa fuerit eadem penultima, mutabit tenorem, et acutum habebit accentem, *et caet.*

DONATUS, 1, 5, 1. Acutus, cum in Graecis dictionibus tria loca teneat, ultimum, paeneultimum, et antepaeneultimum, tenet apud Latinos paeneultimum et antepaeneultimum; ultimum nunquam.

Id. 1, 5, 2. Sane Graeca verba Graecis accentibus melius efferimus.

MAXIMUS VICTORINUS, 17. Accentus sunt, qui Graece *προσ-
ωδία* dicuntur, acutus, gravis, circumflexus. In omni parte
orationis Latinae, item et Graecae, aut acutum aut circum-
flexum poni necesse est, nec amplius quam unum, vel hunc
vel illum. Nam gravis in pluribus ponitur. Acutus cum apud
Graecos tria loca teneat, ultimam et ei proximam syllabam et
antepenultimam; apud nos duobus tantum locis poni potest:
aut in penultima syllaba, ut *praelegístis*, aut in ea quae a fine
est tertia ut *praelégimus*.

Id. ibid. Graeca nomina si iisdem literis proferuntur, Grae-
cos accentus habebunt; nam cum dicimus *Thyas*, *Nais*, acu-
tum habebit posterior accentum; et cum *Themisto*, *Calypso*,
Theano, ultimam circumflecti videbimus. Quod utrumque
Latinus sermo non patitur, nisi admodum raro, ut sola occur-
rit *ergó* conjunctio, in qua posterior circumflexa deprehenditur.

PRISCIAN. *de Accent.* 7. Notandum etiam, quod acutus ac-
centus duo loca habet, penultimum et antepenultimum; apud
Graecos autem penultimum, antepenultimum, et ultimum.

RHYTHM.

§ 27.

IN all the modern European languages, the
rhythm of a verse depends on the accent of each
individual word; that is, an accented syllable al-
ways receives the metrical *ictus*; consequently,
the quantity of syllables, if recognized at all, has
no influence in versification.

In Greek and Latin, on the other hand, the

ictus regularly falls upon a long syllable. The word-accent was not neglected in verse. This is clear from what Aristotle says about the accent of *δίδομεν*, *διδόμεν*, and *οὖ*, *οὔ*, in Homer (§ 25).

The metrical *ictus* must not be confounded with the word-accent; for the former may fall upon an unaccented syllable, and a word may have more than one metrical *ictus*. Thus, *ἔχω* is an iambus; according to Diomedes, a Latin word constituting an anapæst or iambus takes the accent on the first syllable, as *dóminōs*, *bónō*. But as we are accustomed from infancy to regard accent as the only source of rhythm, we find it difficult to preserve it in reading verses based upon quantity, except when it falls upon the arsis. In singing, however, this difficulty is entirely obviated. Thus the following trochaics can be sung to the tune of "Rousseau's Dream" without necessarily losing their word-accent.

ὦ βαθυζώνων ἀνασσα
 Περσίδων ὑπερτάτη,
 Μῆτερ ἢ Ξέρξου γεραία,
 Χαίρει, Δαρείου γύναι.
 Θεοῦ μὲν εὐνάτειρα Περσῶν,
 Θεοῦ δὲ καὶ μήτηρ ἔφῃς.

Sometimes the metrical *ictus* accidentally coincides with the word-accent. Thus:

Dactylic Hexameter Catalectic.

Ὅστινα μὲν βασιλῆα καὶ ἔξοχον ἄνδρα κιχείη.

Iambic Tetrameter Catalectic.

Πῶς γὰρ τὸ μὲν σὸν σῶμα χρή | πληγῶν ἀβῶν εἶναι ;
 Ἄλλ' οὐδαμοῦ νομίζεται | τὸν πατέρα τοῦτο πάσχειν.
 Ἐπεὶ σὺ διὰ τὸ σωφρονεῖν | τῷ πάποτ' εἶδες ἦδη ;
 Ὡς ἦδομαι καὶ τέρπομαι | καὶ βούλομαι χορεῦσαι.
 Μιμούμενος, καὶ τοῖν ποδοῖν | ὥδι παρενσυσλεύων.
 Ἐν τῇ σορῶι νυνὶ λαχὼν | τὸ γράμμα σου δικάζειν.
 Φρουροῦντ' ἐγὼ τε καὶ σὺ · κἄτα περιπατοῦντε νύκτωρ,
 Τῆς ἀρτοπώλιδος λαθόντ' | ἐκλέψαμεν τὸν ὄλμον.

Trochaic Tetrameter Catalectic.

Τάξεων ἀπαλλαγέντες | καὶ κακῶν φοινικικῶν.
 Ἄλλ' ἀκούσωντες τοιούτου | χαίρομεν κηρύγματος.
 Ἐξεφύσησεν τοσούτον | πόλεμον ὥστε τῷ καπνῷ.
 Ταῦτα τοῖνυν μὰ τὸν Ἀπόλλω | ἔγὼ πεπύσμην οὐδενός.
 Τήνδε μὲν δικροῖς ἐώθουν | τὴν θεὸν κεκράγμασιν.

MODERN GREEK OR ROMAIC PRONUNCIATION.

§ 28.

1. *Vowels.*

THE modern Greek has but five vowel-sounds, represented by *A* (α, α), *E* (ε, αι), *I* (ι, υ, ει, η, η, οι, υι), *O* (ο, ω, φ), and *OT*.

A is sounded like *a* in *farm, calm, alms, father*.

After the sound *I* it is not unlike *a* in *peculiarity*. This modification is commonly overlooked by foreigners.

a exactly like *A* ; τιμία pronounced τιμία.

E like *e* in *ferry*, but a little longer.

αι exactly like *E* ; τιμαῖς pronounced τιμές.

I like *i* in *machine*, or like *ee* in *feel*.

υ exactly like *I* ; κύριος pronounced κίριος.

ει exactly like *I* ; σπείρειν pronounced σπίριν.

η exactly like *I* ; τιμή pronounced τιμί.

η exactly like *I* ; τιμῇ pronounced τιμί.

οι exactly like *I* ; οἶκαι pronounced ἴκι.

υι exactly like *I* ; υῖός pronounced ἰός.

O like *o* in *confuse*, but a little longer.

ω exactly like *O* ; ἀνθρώπων pronounced ἀνθρώπον.

φ exactly like *O* ; λόγφ pronounced λόγο.

ΟΤ like *oo* in *moon*, *soon*, *spoon*.

The second letter of the diphthongs *ΑΤ*, *ΕΤ*, *ΗΤ*, and *ΩΤ*, before a vowel, or *B*, *Γ*, *Δ*, *Z*, *Δ*, *M*, *N*, *P*, is pronounced like *B* ; in all other cases, like *Φ* ; as αὐλός ἀβλός, εὐθύς ἐφθύς. (Compare § 22.)

2. *Breathings.*

The rough breathing has no power whatever, or rather it does not differ from the smooth.

3. *Consonants.*

B is the *aspirate* of *b*, and we shall represent it by *bh* ; βίος, *bheé-oss*, συλλαβή, *see-lah-bheé*. The difference between the English *v* and the modern Greek *B* is simply this : *v* is formed by

pressing the upper teeth upon the lower lip; the modern Greek *B* does not require this junction of the upper teeth with the lower lip; that is, the modern *B* is to the English *v* what Φ is to *f*. (See Φ , below.)

The common people pronounce $\gamma\alpha\mu\beta\rho\acute{o}\varsigma$, *gham-bróss*, $\acute{\epsilon}\mu\beta\alpha$, *ém-bah*, but write $\gamma\alpha\mu\pi\rho\acute{o}\varsigma$, $\acute{\epsilon}\mu\pi\alpha$. (See *II*, below.)

Γ is the *aspirate* of *g* hard. It is to the English *g* hard what *th* in *this* is to *d*. Before the vowel-sounds *E* and *I*, it is a little stronger than *y* in *yes*, *ye*. Before the vowel-sounds *A*, *O*, and *OT*, it is sounded like *y* consonantal transferred to the throat. We shall represent it by *gh*; $\gamma\acute{\epsilon}\rho\omega\nu$, *ghéh-ron*, $\acute{\epsilon}\gamma\epsilon\iota\nu\alpha$, *éh-ghée-nah*, $\acute{\alpha}\gamma\alpha\pi\acute{\omega}$, *ah-ghah-próh*, $\acute{\epsilon}\gamma\acute{\omega}$, *eh-ghóh*, $\eta\gamma\omicron\nu\nu$, *eé-ghoon*.

Before Γ , *K*, *X*, or Ξ (that is, $\text{K}\Sigma$), it is sounded like *ng* in *hang*, in which case *K* and the second Γ have each the sound of *g* hard, as in *give*, *go*; as, $\acute{\alpha}\gamma\gamma\epsilon\lambda\omicron\varsigma$, *áng-geh-loss*, $\acute{\alpha}\nu\acute{\alpha}\gamma\kappa\eta$, *ah-náng-gee*, $\acute{\sigma}\acute{\upsilon}\gamma\chi\upsilon\varsigma\iota\varsigma$, *síng-khee-seess*, $\acute{\sigma}\acute{\alpha}\lambda\pi\iota\gamma\kappa\varsigma$ (that is, $\acute{\sigma}\acute{\alpha}\lambda\pi\iota\gamma\kappa\varsigma$), *sál-ping-gs*.

The preservation of the ancient sound of Γ , still heard in such words as $\acute{\alpha}\gamma\gamma\epsilon\lambda\omicron\varsigma$, $\sigma\upsilon\gamma\gamma\epsilon\nu\acute{\eta}\varsigma$, $\acute{\alpha}\gamma\gamma\alpha\rho\epsilon\acute{\iota}\alpha$, $\acute{\alpha}\gamma\gamma\epsilon\acute{\iota}\omicron\nu$, is owing to the power of the nasal sound of the first Γ .

Δ is the *aspirate* of *d*, and is sounded exactly like *th* in *this*, *that*, *rather*, *father*. We shall represent it by *dh*; $\delta\iota\delta\acute{\alpha}\sigma\kappa\alpha\lambda\omicron\varsigma$, *dhee-dháh-skah-loss*,

πηδῶ, *pee-dhóh*. The common people pronounce δένδρο, *dhéndro*, ἄνδρας, *ándrass*, ἑνδύνω (*éndύνω*), *ndeénoh*, but write δέντρο, *ántρας*, ἑντύνω. (See T, below.).

Z like *z* ; as, ζωή, *zoh-eé*, φράζω, *fráh-zoh*.

Θ like *th* in *thin*, *theme*, *mouth* ; as, θεός, *theh-óss*, ἔθος, *éh-thoss*.

K like *k* ; as, κακός, *kah-kóss*, κύριος, *keé-ree-oss*.

After Γ, it has the sound of *g* hard ; as, σὺγγρόνω, *sing-groó-oh*, ἀγκάς, *ang-gáss*.

Λ like *l* ; as, λόγος, *lók-ghoss*. Before the sound I, like *ll* or *lli* in *William* ; or like the Spanish *ll*, Italian *gl*, but not so strong ; as, καλή, *kah-lleé*.

M like *m* ; as, μήτηρ, *meé-teer*, ἑμός, *eh-móss*.

N like *n* ; as, νόμος, *nók-moss*, μένω, *méh-noh*. Before the sound I, like *n* or *ni* in *opinion* ; or like the Spanish *ñ*, Italian *gn*, but not so strong ; as, νίπτω, *ñee-ptoh*.

The final N of the proclitics ἄν, δέν, ἐν, σύν, τόν, τήν, before K, or Ξ (that is, KΣ), is pronounced like Γ under the same circumstances, that is, like *ng* in *hang* ; before Π, or Ψ (that is, ΠΣ), like M ; as, ἄν κόπτω, *ang-góптоh*, ἐν ξύλῳ, *eng-gseé-loh* ; σύν πόνῳ, *seem-bók-noh*, τήν ψυχήν, *teem-bsee-kheén*.

Ξ like KΣ, or *x* in *axe* ; as, ἄξιος, *áh-ksee-oss*. After Γ, or after one of the above-mentioned proclitics, it is sounded like *gs* ; as, σάλπιγξ, *sál-peeng-gs*, τὸν ξηρόν, *tong-gseerón*.

Π like *p* ; as, *πίνω*, *peé-noh*. After **M**, like *b* ; as, *ἐμπρός*, *em-bróss*, *συμπίνω*, *seem-beé-noh*. So when it is preceded by one of the above-mentioned proclitics ; as, *ἐν πόλει*, *em-bóh-lee*.

P like *r*, but a little stronger ; as, *ράβδος*, *ráh-bhdhoss*.

Σ like *s* in *soft*, *'sing* ; as, *σῶμα*, *sóh-mah*, *ἔσω*, *éh-soh*.

Before **B**, **Γ**, **Δ**, **M**, **N**, or **P**, it is sounded like **Z** ; as, *Σμύρνη*, *Zmeér-nee*, *Ἰσραήλ*, *ee-zrah-eél* ; also, in the proclitics *τούς*, *τάς* ; as, *τοὺς γέροντας*, *tooz-ghéh-ron-dass*, *τὰς βασιλείας*, *taz-bhah-see-leé-ass*. From Lucian, Sextus, and Herodian we learn that **Σ** before **M** was sounded like **Z**, and some wrote **ZM** for **ΣM** ; as, *ζμάραγδος*, *ζμύρνα*, *ζμιλίον*. (*Lucian. Jud. Vocal.* 9. *Sextus, adv. Gram.* 9. *Herodian. in CA. vol.* 3, *p.* 250.)

T like *t* in *tell*, *tap*, *tin* ; as, *τόπος*, *tóh-poss*, *αἰτία*, *eh-teé-ah*.

After **N**, it is generally sounded like *d* ; as, *ἐντιμος*, *én-dee-moss*, *ἐνταῦθα*, *en-dáf-thah* ; so also after the proclitics *ἄν*, *δέν*, *ἐν*, *σύν*, *τόν*, *τήν* ; as, *ἄν τρέχω*, *an-dréh-kho*, *τόν τίμιον*, *ton-deé-mion*.

TΣ like *ts* ; used only in foreign and barbarous words ; as, *τσελάτης*, *τσακίζω*, *ἑκατσα*. The Byzantine Greeks represented this sound by **TZ** ; as, *Τζέτζης*, *Tzetzēs*.

Φ like a *labial f* ; as, *φέρω*, *féh-roh*, *σοφός*, *soh-fóss*. The English *f* requires the upper teeth to be

pressed upon the lower lip. The modern Greek Φ requires the mouth to be rounded as in blowing moderately. This fact is apt to be overlooked. (Compare *B*, above.)

Χ like German *ch*, or Spanish *x* (*j*); as, *χαρά*, *khah-ráh*.

Ψ like ΠΣ, or *ps* in *perhaps*; as, *ἔψω*, *éh-psoh*. After *M*, or after one of the above-mentioned proclitics, like *bs*; as, *ἐμψυχος*, *ém-bsee-khoss*, *τὴν ψυχὴν*, *teem-bsee-kheén*.

4. Doubling of Consonants.

When a consonant is *doubled* in the same word, only the first one is pronounced; as, *σφάλλω*, *γράμμα*, pronounced *σφάλω*, *γράμα*.

5. Synizesis.

In conversation, synizesis is very common. It takes place when the vowel-sound *I* is followed by a vowel, in which case, if the *I* is accented, its accent, after the synizesis, is heard on the vowel following the *I*.

(a) The vowel-sound *I*, in case of synizesis, is changed into its corresponding consonant (§ 22), when it stands at the beginning of a word, or when it comes after a vowel, or after *B*, *Γ*, *Δ*, *P*; as,

<i>ἰατρός</i>	pronounced by synizesis	<i>γιατρός</i> ,
<i>ιεράκι</i>	“	<i>γεράκι</i> ,

καράβια	pronounced by synizesis	καράβγα,
καινούργια	“	“ καινούργγα,
καρδία	“	“ καρδγά,
θηρία	“	“ θηργά.

It is observed that *Γ*, in this case, being essentially the same in sound as *I* consonantal (see 3, above), is omitted in pronunciation. Thus, *καινούργια* is simply *καινούργα*.

(b) After *Z*, *K*, *Λ*, *N*, *Ξ*, *Σ*, *X*, and *Ψ*, the *I*, in case of synizesis, is changed into a weak *y* consonantal, not unlike *i* in *carriage*, *marriage*.

(c) After *Θ*, *T*, *Π*, and *Φ*, the *I*, in case of synizesis, is sounded not unlike a weak *y* consonantal preceded by *h*; as,

θειάφι	pronounced by synizesis	θηγάφι,
φωτία	“	“ φωτηγά,
σουνπία	“	“ σουνπηγά,
ξουράφια	“	“ ξουράφηγα.

(d) After *M*, the *I*, in case of synizesis, acquires the sound of the Spanish *ñ*; as *καμμία* *καμμῆά*, *ῥωμός* *ῥωμῆός*.

6. *Rhythm.*

The rhythm of a verse depends upon accent, as in all the other modern languages of Europe.

The *πολιτικοὶ στίχοι* of Michael Psellus would be called *iambic tetrameter catalectic*, if their rhythm depended upon quantity. Take the following specimen (*Boissonade's Anecd. Graec. vol. 3, p. 200*):

Μελέτω σοι γραμματικῆς καὶ τῆς ὀρθογραφίας ·
 Πρῶτος αὕτη θεμέλιος καὶ βάσις μαθημάτων.
 Οὐκ ἔστι δὲ μονότροπος, οὐδὲ κοινὴ καὶ μία,
 Ἄλλ' ἔχει γλώσσας καὶ φωνὰς καὶ πέντε διαλέκτους,
 Αἰολικὴν, Ἰωνικὴν, Ἀτθίδα καὶ Δωρίδα,
 Καὶ τὴν συνήθη καὶ κοινὴν καὶ κατημαξευμένην.

The following specimen of the Romaic of Ptochoprodromos may interest some of our readers.

Ἀπὸ μικρόθεν μ' ἔλεγεν ὁ γέρον ὁ πατήρ μου,
 " Τέκνον μου, μάθε γράμματα ἂν θέλῃς νὰ φελέσῃς ·
 Βλέπεις τὸν δεῖνα, τέκνον μου ; πεζὸς ἐπεριπάτει ·
 Καὶ τώρα, βλέπεις, γέγονε χρυσοφτερνιστηράτος,
 Ἀλογοτριπλοντέλῃνος καὶ παχυμουλαράτος."

Rhyme is so generally employed, as to form one of the distinctive features of modern Greek poetry.

Αὐτὸν τὸν μέγαν ἱατρὸν συντρόφευεν ὁ τρόμος ·
 Τὸν Χάρον δούλευε παντοῦ, ζῇ τώρα ἀστυνόμος.
 Τὸ πρᾶγμα, εἶνε ἀληθές, πολὺ δὲν μετεβλήθη,
 Προτοῦ διαβατήρια ἐμοίραζε 'ς τὰ πλήθη ·
 Ἀπὸ τὴν γῆν μας ἔστειλεν ἀρρώστους εἰς γῆν ἄλλην,
 Τώρα διαβατήρια 'ς τὸν κόσμον δίδει πάλιν.

The following lines, written exactly as they are pronounced by the modern Greeks, will illustrate their mode of reading classical poetry.

Iliad. 8, 1 – 6.

Ἴδς μὲν κροκόπεπλος ἐκίδνατο πᾶσαν ἐπ' ἔαν ·
 Ζεὺς δὲ θεὸν ἀγορὴν πίσατο τερπικέραβιος
 Ἀκροτάτι κοριφὶ πολιδιράδος Οὐλίμπιο.
 Ἀφτὸς δὲ σφ' ἀγόρευε, θεὶ δ' ἰπὸ πάντες ἄκουον ·
 Κέκλιτέ μεφ, πάντες τε θεῖ, πάσε τε θέενη,
 Ὅφρ' ἵπο, τὰ με θιμὸς ἐνὶ στίθεσι κελέβι.

ENGLISH WORDS IN GREEK LETTERS.

§ 29.

Most of the English alphabetical sounds can be only approximately expressed in modern Greek letters, and some of them cannot be expressed at all.

1. *Vowels.*

A in *ah*, *farm*, is sounded like *a*; *father*, φάτερ, *farm*, φάρμ, *alms*, ἄμξ.

A in *past* — *a* nearly; *past*, πάστ, *fast*, φάστ.

A, in *fat*, cannot be expressed. The Greeks often mistake it for *ε*.

A diphthongal, in *fate* — *éi* rapidly uttered; *fate*, φέιτ, *lace*, λέις.

A diphthongal, in *fare* — *éa* nearly; *fare*, φέαρ, *spare*, σπέαρ.

A, in *fall*, is an intermediate sound between *a* and *o*. *O* is its only representative; *fall*, φόλ, *all*, ὅλ, *walk*, ούόκ.

E, in *met*, is an intermediate sound between *ε* and *ι*. It is best represented by *ε*; *met*, μέτ, *sell*, σέλ, *ferry*, φέρι.

E diphthongal, in *there* — *éa* nearly; *there*, δέαρ, *where*, χουέαρ.

E in *mete* — *ι*; *mete*, μίτ, *complete*, κομπλίτ.

E diphthongal, in *mere* — *ία* rapidly uttered ; *mere*,
μίαρ, *sphere*, *σφίαρ*.

I in *machine* — *ι* ; *marine*, *μαρίν*, *police*, *πολίσ*.

I in *pin* — *ι* nearly ; *pin*, *πίν*, *fill*, *φίλ*.

I diphthongal, in *pine* — *άι* rapidly uttered ; *pine*,
παίν, *fine*, *φαίν*.

I triphthongal, in *fire* — *άια* rapidly uttered ; *fire*,
φάιαρ, *spire*, *σπάιαρ*.

O in *odd* — *ο* nearly ; *not*, *νότ*, *con*, *κόν*.

O diphthongal, in *note* — *όου* rapidly uttered ;
note, *νόουτ*, *stone*, *στόουν*.

O diphthongal, in *store* — *όα* nearly ; *store*, *στόαρ*.

O in *nor*, like A in *fall*, which see.

O in *move* — *ου* ; *move*, *μούβ*, *prove*, *προύβ*.

OO in *poor* — *ούα* nearly ; *poor*, *πούαρ*.

O in *son*, like U in *sun*, which see.

OI and OY — *όι* rapidly uttered ; *toil*, *τόιλ*.

OU and OW — *άου* rapidly uttered ; *foul*, *φάουλ*,
town, *τάουν*.

U in *true* — *ου* ; *true*, *τρού*.

U in *full* — *ου*, but a little shorter.

U in *mute* — *ιού* rapidly uttered ; *mute*, *μιούτ*.

U in *pure* — *ιούα* rapidly uttered ; *pure*, *πιούαρ*.

U, in *sun*, seems to be an intermediate sound between *ο* and *ου*. It can be represented by *ο*.

Y like I, which see.

2. Consonants.

B. In modern Greek, this sound is heard only

in the combination $\mu\pi$ (§ 28, 3, Π). Consequently the Greeks employ $\mu\pi$ as its only representative; *bright*, $\mu\pi\rho\acute{\alpha}\iota\tau$, *Byron*, $M\pi\acute{\alpha}\iota\rho\omega\nu$.

C hard, like κ . C soft, like σ .

CH, in *chin*, cannot be expressed in Greek letters; $\tau\sigma$ or $\tau\sigma\iota$ is its only representative; *church*, $\tau\sigma\iota\acute{o}\rho\tau\varsigma$.

D. In modern Greek, this sound is heard only in the combination $\nu\tau$ (§ 28, 3, T). The Greeks therefore employ $\nu\tau$ as its only representative; *die*, $\nu\tau\acute{\alpha}\iota$, *day*, $\nu\tau\acute{\epsilon}\iota$, *double*, $\nu\tau\acute{o}\mu\pi\iota\lambda$, *dead*, $\nu\tau\acute{\epsilon}\nu\tau$, *pardon*, $\pi\acute{\alpha}\rho\nu\tau\omicron\nu$.

F can be represented only by Φ (§ 28, 3, Φ); *farm*, $\phi\acute{\alpha}\rho\mu$, *free*, $\phi\rho\acute{\iota}$.

G. In modern Greek, G hard, or rather guttural, is heard only in the combinations $\gamma\gamma$, $\gamma\kappa$ (§ 28, 3, Γ , \K). The Greeks employ $\gamma\gamma$ or $\gamma\kappa$ as its only representative; *garden*, $\gamma\kappa\acute{\alpha}\rho\nu\tau\epsilon\nu$, *give*, $\gamma\kappa\acute{\iota}\beta$. G soft, or rather lingual, cannot be expressed in Greek letters; $\nu\tau\zeta$ is its only representative; *gem*, $\nu\tau\zeta\acute{\epsilon}\mu$, *oranges*, $\delta\rho\alpha\nu\nu\tau\zeta\acute{\epsilon}\zeta$.

H is usually represented by χ ; *harp*, $\chi\acute{\alpha}\rho\pi$, *him*, $\chi\acute{\iota}\mu$, *hill*, $\chi\acute{\iota}\lambda$.

J, before the sounds E and I, can be represented only by $\nu\tau\zeta$; before all other sounds, only by $\nu\tau\zeta\iota$; *jet*, $\nu\tau\zeta\acute{\epsilon}\tau$, *jig*, $\nu\tau\zeta\iota\gamma\gamma$, *jar*, $\nu\tau\zeta\acute{\iota}\alpha\rho$, *joke*, $\nu\tau\zeta\acute{\iota}\acute{o}\kappa$.

K like κ ; *keep*, $\kappa\acute{\iota}\pi$.

L like λ before *a*; *sell*, $\sigma\acute{\epsilon}\lambda$, *lip*, $\lambda\acute{\iota}\pi$.

M like μ ; *moon*, $\mu\acute{o}\acute{\upsilon}\nu$.

N like ν before α ; *nest*, νέστ.

NG is represented by γγ (§ 28, 3, Γ) ; *king*, κίγγ, *strong*, στρόγγ.

P like π ; *part*, πάρτ, *skip*, σκίπ.

Q like κ. QU like κου ; *quill*, κουίλ.

R like ρ, but not so strong ; *spring*, σπρίγγ.

S like σ, or ζ ; *stick*, στίκ, *slabs*, σλάμπζ.

SH cannot be expressed in Greek letters. It can be represented only by σ or σι ; *shop*, σióπ, *ship* and *sheep*, σίπ.

T, in *tell*, like τ ; *tell*, τέλ, *tomb*, τούμ. T or TI, in *portion*, can be represented only by σ or σι ; *portion*, πόρσιον.

TH in *thin*, like θ ; *thin*, θίν.

TH in *this*, like δ ; *this*, δίς.

V is represented by β (§ 28, 3, B) ; *vane*, βέιν.

W, in *wool*, is the kindred consonant of the vowel-sound ου, and is best represented by ου (§§ 9. 22) ; *wise*, ούάιζ, *wine*, ούάιν. Some represent it by β ; *Washington*, Βάσιγκτων.

X, in *ax*, like ξ ; *six*, σίξ. X, in *example*, can be represented only by γγξ ; *example*, έγγξάμπιλ.

Y consonantal, like ι consonantal (§§ 22; 28, 5). Most commonly the Greeks represent it by γ when it precedes the sound ε or ι ; *yet*, γέτ, γι, γί ; in all other cases, by γι ; *yarn*, γiάρν, *yoke*, γiόκ, *you*, γιού.

Z like ζ ; *maize*, μέιζ, *zeal*, ζίλ.

THE END.

